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<110> diaDexus, Inc.
Macina, Roberto
Turner, Leah
Sun, Yongming
Chen, Huei-Mei
Rodriguez, Maria

<120> Compositions, Splice Variants and Methods Relating to Breast Specific Genes and Proteins

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<213> Homo sapien

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<213> Homo sapien

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<212> DNA
<213> Homo sapien

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<212> DNA
<213> Homo sapien

<400> 49
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<211> 1206
<212> DNA
<213> Homo sapien

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<212> DNA
<213> Homo sapien

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<400> 51
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tctacgtccg agagtgagtg gccacaggta gaaccgcggc cgaagcccac cactggccat 300

gctcaccgcc ctgcttcact gccccctccg tcccaccccc tccttctagg atagcgctcc 360

ccttacccca gtcacttctg ggggtcactg ggatgcctct tgcagggtct tgctttcttt 420

gacctcttct ctcctccccc acaccaacaa agaggaatgg ctgcaagagc ccagatcacc 480

cattccgggt tcactccccg cctccccaag tcagcagtcc tagccccaaa ccagcccaga 540

gcagggtctc tctaaagggg acttgagggc ctgagcagga aagactggcc ctctagcttc 600

taccctttgt ccctgtagcc tatacagttt agaatattta tttgttaatt ttattaaaat 660

gctttaaaaa aataaaaaaa aaaaaacaaa aaaaaaaaag aagagcccgg cgcgcgaaac 720

ccgcgtggcc atggcgcggc gacccgcggg gcgcgaaaac agtggcgtac ctcgcggcct 780

ccccaaattc tccccaccca cctttagcgc agcgaccaac gtgcgcgccg cgcagcgggg 840

gcggccgcga cgagcgccgg acgctacgcg acggacggcg cgggccggca ccacgccacc 900

acgtcacggg cagccgccag cgcacgcccg ggcggcgcct gctcacaacc gaggtctgcc 960

tagttgctgc tcccggtgcc gagccaaggc ccgctacgca cgcccacgca gggctgaggc 1020

agcggcacgc gcgcggcgtg caacgccggc ggcacccggc tggaggggg gaggcaccgc 1080

aacacggccg acgcggcgaa gagcgggaac aaacgcacac gacccacacc gcaacggtga 1140

gcaacgaccg agcggccagc ggcgaccgcg gcgtggcagc aggcgacgac gccacgagac 1200

gcgcgagagc gagagaccac tccgaggcgc cggcccgggt gtgccaggcc cgacgcgtgg 1260

tggcc 1265

<210> 92
<211> 1406
<212> DNA
<213> Homo sapien

<400> 92
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tctcggtccc cagagaagcc tggacccaca cgcgggctag atccagagaa cctgacgacc 120

cggcgacggc gacgtctctt ttgactaaaa gacagtgtcc agtgctccag cctaggagtc 180

tacggggacc gcctcccgcg ccgccaccat gcccaacttc tctggcaact ggaaaatcat 240

ccgatcggaa aacttcgagg aattgctcaa agtgctgggg gtgaatgtga tgctgaggaa 300

gattgctgtg gctgcagcgt ccaagccagc agtggagatc aaacaggagg gagacacttt 360

ctacatcaaa acctccacca ccgtgcgcac cacagagatt aacttcaagg ttggggagga 420

gtttgaggag cagactgtgg atgggaggcc ctgtaagcac tgccccctcc gtcccacccc 480

ctccttctag gatagcgctc cccttacccc agtcacttct gggggtcact gggatgcctc 540

ttgcagggtc ttgctttctt tgacctcttc tctcctcccc tacaccaaca aagaggaatg 600

gctgcaagag cccagatcac ccattccggg ttcactcccc gcctccccaa gtcagcagtc 660

ctagccccaa accagcccag agcagggtct ctctaaaggg gacttgaggg cctgagcagg 720

aaagactggc cctctagctt ctacccttg tccctgtagc ctatacagtt tagaatattt 780

atttgttaat tttattaaaa tgctttaaaa aaataaaaaa aaaaaaacaa aaaaaaaaaa 840

gaagagcccg gcgcgcgaaa cccgcgtggc catggcgcgg cgacccgcgg ggcgcgaaaa 900

cagtggcgta cctcgcggcc tccccaaatt ctccccaccc acctttagcg cagcgaccaa 960

cgtgcgcgcc gcgcagcggg ggcggccgcg acgagcgccg gacgctacgc gacggacggc 1020

gcgggccggc accacgccac cacgtcacgg gcagccgcca gcgcacgccc gggcggcgcc 1080

tgctcacaac cgaggtctgc ctagttgctg ctcccggtgc cgagccaagg cccgctacgc 1140

acgcccacgc agggctgagg cagcggcacg cgcgcggcgt gcaacgccgg cggcacccgg 1200

ctggaggggg ggaggcaccg caacacggcc gacgcggcga agagcgggaa caaacgcaca 1260

cgacccacac cgcaacggtg agcaacgacc gagcggccag cggcgaccgc ggcgtggcag 1320

caggcgacga cgccacgaga cgcgcgagag cgagagacca ctccgaggcg ccggcccggg 1380

tgtgccaggc ccgacgcgtg gtggcc 1406

<210> 93
<211> 1441
<212> DNA
<213> Homo sapien

<400> 93
ccctctctga gtacggagtg gtcccactgg atccagttca gggttcaatg gagctagggc 60

cagctacggc tcaagatctg gggtccgcct gcgggtgggg tcgccaggtg tccggcacca 120

aggagttgaa tgcaccgagt cagaacctga cgacccggcg acggcgacgt ctcttttgac 180

taaaagacag tgtccagtgc tccagcctag gagtctacgg ggaccgcctc ccgcgccgcc 240

accatgccca acttctctgg caactggaaa atcatccgat cggaaaactt cgaggaattg 300

ctcaaagtgc tgggggtgaa tgtgatgctg aggaagattg ctgtggctgc agcgtccaag 360

ccagcagtgg agatcaaaca ggagggagac actttctaca tcaaaacctc caccaccgtg 420

cgcaccacag agattaactt caaggttggg gaggagtttg aggagcagac tgtggatggg 480

aggccctgta agcactgccc cctccgtccc acccccctcct tctaggatag cgctcccctt 540

accccagtca cttctggggg tcactgggat gcctcttgca gggtcttgct ttctttgacc 600

tcttctctcc tcccctacac caacaaagag gaatggctgc aagagcccag atcacccatt 660

ccgggttcac tccccgcctc cccaagtcag cagtcctagc cccaaaccag cccagagcag 720

ggtctctcta aaggggactt gagggcctga gcaggaaaga ctggccctct agcttctacc 780

ctttgtccct gtagcctata cagtttagaa tatttatttg ttaattttat taaaatgctt 840

taaaaaaata aaaaaaaaaa aacaaaaaaa aaaaagaaga gcccggcgcg cgaaacccgc 900

gtggccatgg cgcggcgacc cgcggggcgc gaaaacagtg gcgtacctcg cggcctcccc 960

aaattctccc cacccacctt tagcgcagcg accaacgtgc gcgccgcgca gcgggggcgg 1020

ccgcgacgag cgccggacgc tacgcgacgg acggcgcggg ccggcaccac gccaccacgt 1080

cacgggcagc cgccagcgca cgcccgggcg gcgcctgctc acaaccgagg tctgcctagt 1140

tgctgctccc ggtgccgagc caaggcccgc tacgcacgcc cacgcagggc tgaggcagcg 1200

gcacgcgcgc ggcgtgcaac gccggcggca cccggctgga ggggggggagg caccgcaaca 1260

cggccgacgc ggcgaagagc gggaacaaac gcacacgacc cacaccgcaa cggtgagcaa 1320

cgaccgagcg gccagcggcg accgcggcgt ggcagcaggc gacgacgcca cgagacgcgc 1380

gagagcgaga gaccactccg aggcgccggc ccgggtgtgc caggcccgac gcgtggtggc 1440

c 1441

<210> 94
<211> 1062
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (19)..(19)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (63)..(63)
<223> n=a, c, g or t

<400> 94
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gcncccgggg gcccgaaaaa agcccaccac tggccatgct caccgccctg cttcactgcc 120

ccctccgtcc cacccccctcc ttctaggata gcgctcccct taccccagtc acttctgggg 180

gtcactggga tgcctcttgc agggtcttgc tttctttgac ctcttctctc ctcccctaca 240

ccaacaaaga ggaatggctg caagagccca gatcacccat tccgggttca ctccccgcct 300

ccccaagtca gcagtcctag ccccaaacca gcccagagca gggtctctct aaaggggact 360

tgagggcctg agcaggaaag actggccctc tagcttctac cctttgtccc tgtagcctat 420

acagtttaga atatttattt gttaatttta ttaaaatgct ttaaaaaaat aaaaaaaaaa 480

aaacaaaaaa aaaaaagaag agcccggcgc gcgaaacccg cgtggccatg gcgcggcgac 540

ccgcggggcg cgaaaacagt ggcgtacctc gcggcctccc caaattctcc ccacccacct 600

ttagcgcagc gaccaacgtg cgcgccgcgc agcgggggcg gccgcgacga gcgccggacg 660

ctacgcgacg gacggcgcgg gccggcacca cgccaccacg tcacgggcag ccgccagcgc 720

acgcccgggc ggcgcctgct cacaaccgag gtctgcctag ttgctgctcc cggtgccgag 780

ccaaggcccg ctacgcacgc ccacgcaggg ctgaggcagc ggcacgcgcg cggcgtgcaa 840

cgccggcggc acccggctgg agggggggag gcaccgcaac acggccgacg cggcgaagag 900

cgggaacaaa cgcacacgac ccacaccgca acggtgagca acgaccgagc ggccagcggc 960

gaccgcggcg tggcagcagg cgacgacgcc acgagacgcg cgagagcgag agaccactcc 1020

gaggcgccgg cccgggtgtg ccaggcccga cgcgtggtgg cc 1062

<210> 95
<211> 937
<212> DNA
<213> Homo sapien

<400> 95
gcggcgccag tgtgatggat gcggccgccc gggcaggtcc cagtcacttc tgggggtcac 60

tgggatgcct cttgcagggt cttgctttct ttgacctctt ctctcctccc ctacaccaac 120

aaagaggaat ggctgcaaga gcccagatca cccattccgg gttcactccc cgcctcccca 180

agtcagcagt cctagcccca aaccagccca gagcagggtc tctctaaagg ggacttgagg 240

gcctgagcag gaaagactgg ccctctagct tctacccttt gtccctgtag cctatacagt 300

ttagaatatt tatttgttaa ttttattaaa atgctttaaa aaaataaaaa aaaaaaaaca 360

aaaaaaaaaa agaagagccc ggcgcgcgaa acccgcgtgg ccatggcgcg gcgacccgcg 420

gggcgcgaaa acagtggcgt acctcgcggc ctccccaaat tctccccacc caccttttagc 480

gcagcgacca acgtgcgcgc cgcgcagcgg gggcggccgc gacgagcgcc ggacgctacg 540

cgacggacgg cgcgggccgg caccacgcca ccacgtcacg ggcagccgcc agcgcacgcc 600

cgggcggcgc ctgctcacaa ccgaggtctg cctagttgct gctcccggtg ccgagccaag 660

gcccgctacg cacgcccacg cagggctgag gcagcggcac gcgcgcggcg tgcaacgccg 720

gcggcacccg gctggagggg gggaggcacc gcaacacggc cgacgcggcg aagagcggga 780

acaaacgcac acgacccaca ccgcaacggt gagcaacgac cgagcggcca gcggcgaccg 840

cggcgtggca gcaggcgacg acgccacgag acgcgcgaga gcgagagacc actccgaggc 900

gccggcccgg gtgtgccagg cccgacgcgt ggtggcc 937

<210> 96
<211> 117
<212> PRT
<213> Homo sapien

<400> 96

Met Trp Thr Asn Phe Gln Asn Tyr Pro Leu Cys Phe Leu Gly Arg Phe
1 5 10 15

Arg Ser Leu Thr Thr Ala Phe Phe Arg Asp Ala Met Gly Phe Leu Leu
20 25 30

Met Phe Asp Leu Thr Ser Gln Gln Ser Phe Leu Asn Val Arg Asn Trp
35 40 45

Met Ser Gln Leu Gln Ala Asn Ala Tyr Cys Glu Asn Pro Asp Ile Val
50 55 60

Leu Ile Gly Asn Lys Ala Asp Leu Pro Asp Gln Arg Glu Val Asn Glu
65 70 75 80

Arg Gln Ala Arg Glu Leu Ala Asp Lys Tyr Gly Cys Lys Leu Ser Thr
85 90 95

Leu Gly Ile Asn Lys Phe Asp Glu Ala Cys Leu Ser Leu His Gln Trp
100 105 110

Ser Glu Cys Ser Ser
115

<210> 97
<211> 651
<212> PRT
<213> Homo sapien

<400> 97

Met Ala Thr Ala Ser Pro Arg Ser Asp Thr Ser Asn Asn His Ser Gly
1 5 10 15

Arg Leu Gln Leu Gln Val Thr Val Ser Ser Ala Lys Leu Lys Arg Lys
20 25 30

Lys Asn Trp Phe Gly Thr Ala Ile Tyr Thr Glu Val Val Val Asp Gly
35 40 45

Glu Ile Thr Lys Thr Ala Lys Ser Ser Ser Ser Ser Asn Pro Lys Trp
50 55 60

Asp Glu Gln Leu Thr Val Asn Val Thr Pro Gln Thr Thr Leu Glu Phe
65 70 75 80

Gln Val Trp Ser His Arg Thr Leu Lys Ala Asp Ala Leu Leu Gly Lys
85 90 95

Ala Thr Ile Asp Leu Lys Gln Ala Leu Leu Ile His Asn Arg Lys Leu
100 105 110

Glu Arg Val Lys Glu Gln Leu Lys Leu Ser Leu Glu Asn Lys Asn Gly
115 120 125

```
Ile Ala Gln Thr Gly Glu Leu Thr Val Val Leu Asp Gly Leu Val Ile
    130                 135                 140

Glu Gln Glu Asn Ile Thr Asn Cys Ser Ser Ser Pro Thr Ile Glu Ile
145                 150                 155                 160

Gln Glu Asn Gly Asp Ala Leu His Glu Asn Gly Glu Pro Ser Ala Arg
                165                 170                 175

Thr Thr Ala Arg Leu Ala Val Glu Gly Thr Asn Gly Ile Asp Asn His
            180                 185                 190

Val Pro Thr Ser Thr Leu Val Gln Asn Ser Cys Cys Ser Tyr Val Val
        195                 200                 205

Asn Gly Asp Asn Thr Pro Ser Ser Pro Ser Gln Val Ala Ala Arg Pro
    210                 215                 220

Lys Asn Thr Pro Ala Pro Lys Pro Leu Ala Ser Glu Pro Ala Asp Asp
225                 230                 235                 240

Thr Val Asn Gly Glu Ser Ser Ser Phe Ala Pro Thr Asp Asn Ala Ser
                245                 250                 255

Val Thr Gly Thr Pro Val Val Ser Glu Glu Asn Ala Leu Ser Pro Asn
            260                 265                 270

Cys Thr Ser Thr Thr Val Glu Asp Pro Pro Val Gln Glu Ile Leu Thr
        275                 280                 285

Ser Ser Glu Asn Asn Glu Cys Ile Pro Ser Thr Ser Ala Glu Leu Glu
    290                 295                 300

Ser Glu Ala Arg Ser Ile Leu Glu Pro Asp Thr Ser Asn Ser Arg Ser
305                 310                 315                 320

Ser Ser Ala Phe Glu Ala Ala Lys Ser Arg Gln Pro Asp Gly Cys Met
                325                 330                 335

Asp Pro Val Arg Gln Gln Ser Gly Asn Ala Asn Thr Glu Thr Leu Pro
            340                 345                 350

Ser Gly Trp Glu Gln Arg Lys Asp Pro His Gly Arg Thr Tyr Tyr Val
        355                 360                 365

Asp His Asn Thr Arg Thr Thr Thr Trp Glu Arg Pro Gln Pro Leu Pro
```

370 375 380

Pro Gly Trp Glu Arg Arg Val Asp Asp Arg Arg Arg Val Tyr Tyr Val
385 390 395 400

Asp His Asn Thr Arg Thr Thr Thr Trp Gln Arg Pro Thr Met Glu Ser
405 410 415

Val Arg Asn Phe Glu Gln Trp Gln Ser Gln Arg Asn Gln Leu Gln Gly
420 425 430

Ala Met Gln Gln Phe Asn Gln Arg Tyr Leu Tyr Ser Ala Ser Met Leu
435 440 445

Ala Ala Glu Asn Asp Pro Tyr Gly Pro Leu Pro Pro Gly Trp Glu Lys
450 455 460

Arg Val Asp Ser Thr Asp Arg Val Tyr Phe Val Asn His Asn Thr Lys
465 470 475 480

Thr Thr Gln Trp Glu Asp Pro Arg Thr Gln Gly Leu Gln Asn Glu Glu
485 490 495

Thr Leu Gly Arg Arg Leu Arg Gln Phe Arg Ile Phe Ser Val Lys Val
500 505 510

Leu Arg Ser Pro Cys Cys Thr His Ser Thr Gln Gln Pro Thr Pro Phe
515 520 525

Pro Arg Leu Leu Arg Met Arg Lys Pro Thr Asp Thr Ser Asn Gly Gly
530 535 540

Pro Ala Asn Cys Pro Thr Glu Arg Arg Leu Gln Val Lys Pro Ala Lys
545 550 555 560

Tyr Pro Lys Met Gly Pro Ser Leu Met Ala Tyr Pro Arg Thr Gly Thr
565 570 575

Asn Thr Ala Ser Pro Gly Gln Gln Ser Ala Thr Glu Pro Pro Pro Thr
580 585 590

Lys Met Gly Gln Thr Pro Gln Asp Arg Glu Gly Arg His Arg Asn Leu
595 600 605

Thr Ala Glu Pro Ser Thr Asn Gln Gly Thr Arg Lys Glu Pro Pro His
610 615 620

```
Asn Val Pro Pro Thr Val Gln Thr His Asn Gln Leu Ser Asn Asp Asn
625                 630                 635                 640

Asn Thr Asn Thr Ile Arg Asn Asn Thr Ser Asn
                645                 650
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<210> 98
<211> 645
<212> PRT
<213> Homo sapien

<400> 98

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Tyr Ile Val Leu Ala Glu Phe Trp Asp Met Ala Thr Ala Ser Pro Arg
1               5                   10                  15

Ser Asp Thr Ser Asn Asn His Ser Gly Arg Leu Gln Leu Gln Val Thr
            20                  25                  30

Val Ser Ser Ala Lys Leu Lys Arg Lys Lys Asn Trp Phe Gly Thr Ala
        35                  40                  45

Ile Tyr Thr Glu Val Val Val Asp Gly Glu Ile Thr Lys Thr Ala Lys
    50                  55                  60

Ser Ser Ser Ser Ser Asn Pro Lys Trp Asp Glu Gln Leu Thr Val Asn
65                  70                  75                  80

Val Thr Pro Gln Thr Thr Leu Glu Phe Gln Val Trp Ser His Arg Thr
                85                  90                  95

Leu Lys Ala Asp Ala Leu Leu Gly Lys Ala Thr Ile Asp Leu Lys Gln
            100                 105                 110

Ala Leu Leu Ile His Asn Arg Lys Leu Glu Arg Val Lys Glu Gln Leu
        115                 120                 125

Lys Leu Ser Leu Glu Asn Lys Asn Gly Ile Ala Gln Thr Gly Glu Leu
    130                 135                 140

Thr Val Val Leu Asp Gly Leu Val Ile Glu Gln Glu Asn Ile Thr Asn
145                 150                 155                 160

Cys Ser Ser Ser Pro Thr Ile Glu Ile Gln Glu Asn Gly Asp Ala Leu
                165                 170                 175
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His Glu Asn Gly Glu Pro Ser Ala Arg Thr Thr Ala Arg Leu Ala Val
180 185 190

Glu Gly Thr Asn Gly Ile Asp Asn His Val Pro Thr Ser Thr Leu Val
195 200 205

Gln Asn Ser Cys Cys Ser Tyr Val Val Asn Gly Asp Asn Thr Pro Ser
210 215 220

Ser Pro Ser Gln Val Ala Ala Arg Pro Lys Asn Thr Pro Ala Pro Lys
225 230 235 240

Pro Leu Ala Ser Glu Pro Ala Asp Asp Thr Val Asn Gly Glu Ser Ser
245 250 255

Ser Phe Ala Pro Thr Asp Asn Ala Ser Val Thr Gly Thr Pro Val Val
260 265 270

Ser Glu Glu Asn Ala Leu Ser Pro Asn Cys Thr Ser Thr Thr Val Glu
275 280 285

Asp Pro Pro Val Gln Glu Ile Leu Thr Ser Ser Glu Asn Asn Glu Cys
290 295 300

Ile Pro Ser Thr Ser Ala Glu Leu Glu Ser Glu Ala Arg Ser Ile Leu
305 310 315 320

Glu Pro Asp Thr Ser Asn Ser Arg Ser Ser Ser Ala Phe Glu Ala Ala
325 330 335

Lys Ser Arg Gln Pro Asp Gly Cys Met Asp Pro Val Arg Gln Gln Ser
340 345 350

Gly Asn Ala Asn Thr Glu Thr Leu Pro Ser Gly Trp Glu Gln Arg Lys
355 360 365

Asp Pro His Gly Arg Thr Tyr Tyr Val Asp His Asn Thr Arg Thr Thr
370 375 380

Thr Trp Glu Arg Pro Gln Pro Leu Pro Pro Gly Trp Glu Arg Arg Val
385 390 395 400

Asp Asp Arg Arg Arg Val Tyr Tyr Val Asp His Asn Thr Arg Thr Thr
405 410 415

Thr Trp Gln Arg Pro Thr Met Glu Ser Val Arg Asn Phe Glu Gln Trp

420 425 430

Gln Ser Gln Arg Asn Gln Leu Gln Gly Ala Met Gln Gln Phe Asn Gln
435 440 445

Arg Tyr Leu Tyr Ser Ala Ser Met Leu Ala Ala Glu Asn Asp Pro Tyr
450 455 460

Gly Pro Leu Pro Pro Gly Trp Glu Lys Arg Val Asp Ser Thr Asp Arg
465 470 475 480

Val Tyr Phe Val Asn His Asn Thr Lys Thr Thr Gln Trp Glu Asp Pro
485 490 495

Arg Thr Gln Gly Leu Gln Asn Glu Glu Thr Leu Gly Arg Arg Leu Arg
500 505 510

Gln Phe Arg Ile Phe Ser Val Lys Val Leu Arg Ser Pro Cys Cys Thr
515 520 525

His Ser Thr Gln Gln Pro Thr Pro Phe Pro Arg Leu Leu Arg Met Arg
530 535 540

Lys Pro Thr Asp Thr Ser Asn Gly Gly Pro Ala Asn Cys Pro Thr Glu
545 550 555 560

Arg Arg Leu Gln Val Lys Pro Ala Lys Tyr Pro Lys Met Gly Pro Ser
565 570 575

Leu Met Ala Tyr Pro Arg Thr Gly Thr Asn Thr Ala Ser Pro Gly Gln
580 585 590

Gln Ser Ala Thr Glu Pro Pro Pro Thr Lys Met Gly Gln Thr Pro Gln
595 600 605

Asp Arg Glu Gly Arg His Arg Asn Leu Thr Ala Glu Pro Ser Thr Asn
610 615 620

Gln Gly Thr Arg Lys Glu Pro Thr Pro Gln Arg Thr Thr His Ser Ala
625 630 635 640

Asp Ala Gln Pro Thr
645

<210> 99
<211> 125

<212> PRT
<213> Homo sapien

<400> 99

Met Gly Pro Gly Gly Pro Leu Leu Ser Pro Ser Arg Gly Phe Leu Leu
1 5 10 15

Cys Lys Thr Gly Trp His Ser Asn Arg Leu Leu Gly Asp Cys Gly Pro
20 25 30

His Thr Pro Val Ser Thr Ala Leu Ser Phe Ile Ala Val Gly Met Ala
35 40 45

Ala Pro Ser Met Lys Glu Arg Gln Val Cys Trp Gly Ala Arg Asp Glu
50 55 60

Tyr Trp Lys Cys Leu Asp Glu Asn Leu Glu Asp Ala Ser Gln Cys Lys
65 70 75 80

Lys Leu Arg Ser Ser Phe Glu Ser Ser Cys Pro Gln Gln Trp Ile Lys
85 90 95

Tyr Phe Asp Lys Arg Arg Asp Tyr Leu Lys Phe Lys Glu Lys Phe Glu
100 105 110

Ala Gly Gln Phe Glu Pro Ser Glu Thr Thr Ala Lys Ser
115 120 125

<210> 100
<211> 164
<212> PRT
<213> Homo sapien

<400> 100

Phe Phe Leu Glu Pro Cys Ala Pro Leu Leu Ala Glu Pro Leu Leu Glu
1 5 10 15

Arg Asp Glu Ala Glu Gly Val Gly Gly Ala Asp Ala Gly Pro Ala Leu
20 25 30

Leu Tyr Gly Leu Val Gly Asp Gly Glu Leu Ala Gln Val Val Ala Asn
35 40 45

His Leu Gly Leu Asp Leu His Leu Val Glu Gly Leu Ala Val Val Asp
50 55 60

Ala His His Ala Ala His His Leu Gly Gln Asp Asp His Val Pro Gln

65 70 75 80

Val Arg Leu His His Phe Arg Leu Leu His Gly Arg Arg Leu Leu Leu
85 90 95

Gly Leu Ala Gln Ala Leu Gln Gln Gly Val Leu Leu Pro Pro Gln Ala
100 105 110

Pro Val Gln Pro Pro Pro Leu Ala Arg Thr Val Gln Leu His Gln Leu
115 120 125

Leu Val Gly His Val Gln Gln Leu Val Glu Val His Ala Ala Leu His
130 135 140

Arg Ser Arg Asn Gly Ser Pro Ile Tyr Glu Gly Lys Thr Gly Leu Leu
145 150 155 160

Gly Gly Pro Gly

<210> 101
<211> 129
<212> PRT
<213> Homo sapien

<400> 101

Phe Phe Leu Glu Pro Cys Ala Pro Leu Leu Ala Glu Pro Leu Leu Glu
1 5 10 15

Arg Asp Glu Ala Glu Gly Val Gly Gly Ala Asp Ala Gly Pro Ala Leu
20 25 30

Leu Tyr Gly Leu Val Gly Asp Gly Glu Leu Ala Gln Val Val Ala Asn
35 40 45

His Leu Gly Leu Asp Leu His Leu Val Glu Gly Leu Ala Val Val Asp
50 55 60

Ala His His Ala Ala His His Leu Gly Gln Asp Asp His Val Pro Gln
65 70 75 80

Val Arg Leu His His Phe Arg Leu Leu His Gly Arg Arg Leu Leu Leu
85 90 95

Gly Leu Ala Gln Ala Leu Gln Gln Gly Val Leu Leu Pro Pro Gln Ala
100 105 110

Pro Val Gln Pro Pro Arg Trp Arg Ala Leu Tyr Ser Cys Ile Ser Cys
115 120 125

Ser

<210> 102
<211> 139
<212> PRT
<213> Homo sapien

<400> 102

Asp Pro Arg Trp Ala Leu Tyr Ser Leu Tyr Val Tyr Lys Phe Leu His
1 5 10 15

Phe Ser Tyr Ser Ser Ala Lys Asn Pro Asp Gly Cys Phe Phe Gln Lys
20 25 30

Val Leu Asn Gly Phe Thr Lys Phe Phe Cys Lys Glu Gln Tyr Cys Lys
35 40 45

Leu Leu Lys Leu Tyr Phe Tyr Arg Leu Phe Ala Leu Leu Trp Ile Leu
50 55 60

Cys Leu Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu
65 70 75 80

Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys Gly Phe Ile Ile
85 90 95

Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro Glu Glu Tyr Val
100 105 110

Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn Leu Phe Leu His
115 120 125

Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys
130 135

<210> 103
<211> 525
<212> PRT
<213> Homo sapien

<400> 103

Met Gly Asp Leu Glu Leu Leu Leu Pro Gly Glu Ala Glu Val Leu Val
1 5 10 15

Arg Gly Leu Arg Ser Phe Pro Leu Arg Glu Met Gly Ser Glu Gly Trp
20 25 30

Asn Gln Gln His Glu Asn Leu Glu Lys Leu Asn Met Gln Ala Ile Leu
35 40 45

Asp Ala Thr Val Ser Gln Gly Glu Pro Ile Gln Glu Leu Leu Val Thr
50 55 60

His Gly Lys Val Pro Thr Leu Val Glu Glu Leu Ile Ala Val Glu Met
65 70 75 80

Trp Lys Gln Lys Val Phe Pro Val Phe Cys Arg Val Glu Asp Phe Lys
85 90 95

Pro Gln Asn Thr Phe Pro Ile Tyr Met Val Val His His Glu Ala Ser
100 105 110

Ile Ile Asn Leu Leu Glu Thr Val Phe Phe His Lys Glu Val Cys Glu
115 120 125

Ser Ala Glu Asp Thr Val Leu Asp Leu Val Asp Tyr Cys His Arg Lys
130 135 140

Leu Thr Leu Leu Val Ala Gln Ser Gly Cys Gly Gly Pro Pro Glu Gly
145 150 155 160

Glu Gly Ser Gln Asp Ser Asn Pro Met Gln Glu Leu Gln Lys Gln Ala
165 170 175

Glu Leu Met Glu Phe Glu Ile Ala Leu Lys Ala Leu Ser Val Leu Arg
180 185 190

Tyr Ile Thr Asp Cys Val Asp Ser Leu Ser Leu Ser Thr Leu Ser Arg
195 200 205

Met Leu Ser Thr His Asn Leu Pro Cys Leu Leu Val Glu Leu Leu Glu
210 215 220

His Ser Pro Trp Ser Arg Arg Glu Gly Gly Lys Leu Gln Gln Phe Glu
225 230 235 240

Gly Ser Arg Trp His Thr Val Ala Pro Ser Glu Gln Gln Lys Leu Ser
245 250 255

Lys Leu Asp Gly Gln Val Trp Ile Ala Leu Tyr Asn Leu Leu Leu Ser
260 265 270

Pro Glu Ala Gln Ala Arg Tyr Cys Leu Thr Ser Phe Ala Lys Gly Arg
275 280 285

Leu Leu Lys Val Arg Leu Pro Pro His Gln Pro Pro Gln Pro Gln Tyr
290 295 300

Arg Pro Pro His Pro Thr Pro Thr Ala Ser Leu Leu Phe Ile Phe Ala
305 310 315 320

His Pro Pro Gln Pro Gln Cys Ser Phe Gln Ser Leu Gly Leu Ser Asp
325 330 335

Thr Pro Ala Ser Gly Thr Trp Ala Pro Thr Gly Ile Leu Ser Pro Thr
340 345 350

Gln Pro Leu Pro Phe Pro Trp Pro Pro Gly Gln His Leu His His Thr
355 360 365

Gly Leu His Trp Thr Pro Leu Gln Leu Arg Ala Phe Leu Thr Asp Thr
370 375 380

Leu Leu Asp Gln Leu Pro Asn Leu Ala His Leu Gln Ser Phe Leu Ala
385 390 395 400

His Leu Thr Leu Thr Glu Thr Gln Pro Pro Lys Lys Asp Leu Val Leu
405 410 415

Glu Gln Ile Pro Glu Ile Trp Glu Arg Leu Glu Arg Glu Asn Arg Gly
420 425 430

Lys Trp Gln Ala Ile Ala Lys His Gln Leu Gln His Val Phe Ser Pro
435 440 445

Ser Glu Gln Asp Leu Arg Leu Gln Ala Arg Arg Trp Ala Glu Thr Tyr
450 455 460

Arg Leu Asp Val Leu Glu Ala Val Ala Pro Glu Arg Pro Arg Cys Ala
465 470 475 480

Tyr Cys Ser Ala Glu Ala Ser Lys Arg Cys Ser Arg Cys Gln Asn Glu
485 490 495

Trp Tyr Cys Cys Arg Glu Cys Gln Val Lys His Trp Glu Lys His Gly
500 505 510

Lys Thr Cys Val Leu Ala Ala Gln Gly Asp Arg Ala Lys
515 520 525

<210> 104
<211> 385
<212> PRT
<213> Homo sapien

<400> 104

Pro Phe Pro Trp Leu Arg Glu Leu Thr Leu Pro Asn Arg Pro Ala Thr
1 5 10 15

Val Leu Ser Gln Thr Leu Ala Pro Ser Gly Ser Val Val Pro Glu Cys
20 25 30

Asp Ser Ile Pro Thr Pro Ala Ala Ala Gln Asp Pro Pro Asp Pro Gly
35 40 45

Leu Asp Met Gly Asp Leu Glu Leu Leu Leu Pro Gly Glu Ala Glu Val
50 55 60

Leu Val Arg Gly Leu Arg Ser Phe Pro Leu Arg Glu Met Gly Ser Glu
65 70 75 80

Gly Trp Asn Gln Gln His Glu Asn Leu Glu Lys Leu Asn Met Gln Ala
85 90 95

Ile Leu Asp Ala Thr Val Ser Gln Gly Glu Pro Ile Gln Glu Leu Leu
100 105 110

Val Thr His Gly Lys Val Pro Thr Leu Val Glu Glu Leu Ile Ala Val
115 120 125

Glu Met Trp Lys Gln Lys Val Phe Pro Val Phe Cys Arg Val Glu Asp
130 135 140

Phe Lys Pro Gln Asn Thr Phe Pro Ile Tyr Met Val Val His His Glu
145 150 155 160

Ala Ser Ile Ile Asn Leu Leu Glu Thr Val Phe Phe His Lys Glu Val
165 170 175

Cys Glu Ser Ala Glu Asp Thr Val Leu Asp Leu Val Asp Tyr Cys His
180 185 190

Arg Lys Leu Thr Leu Leu Val Ala Gln Ser Gly Cys Gly Gly Pro Pro
195 200 205

Glu Gly Glu Gly Ser Gln Asp Ser Asn Pro Met Gln Glu Leu Gln Lys
210 215 220

Gln Ala Glu Leu Met Glu Phe Glu Ile Ala Leu Lys Ala Leu Ser Val
225 230 235 240

Leu Arg Tyr Ile Thr Asp Cys Val Asp Ser Leu Ser Leu Ser Thr Leu
245 250 255

Ser Arg Met Leu Ser Thr His Asn Leu Pro Cys Leu Leu Val Glu Leu
260 265 270

Leu Glu His Ser Pro Trp Ser Arg Arg Glu Gly Gly Lys Leu Gln Gln
275 280 285

Phe Glu Gly Ser Arg Trp His Thr Val Ala Pro Ser Glu Gln Gln Lys
290 295 300

Leu Ser Lys Leu Asp Gly Gln Val Trp Ile Ala Leu Tyr Asn Leu Leu
305 310 315 320

Leu Ser Pro Glu Ala Gln Ala Arg Tyr Cys Leu Thr Ser Phe Ala Lys
325 330 335

Gly Arg Leu Leu Lys Val Arg Leu Pro Pro His Gln Pro Pro Gln Pro
340 345 350

Gln Tyr Arg Pro Pro His Pro Thr Pro Thr Ala Ser Leu Leu Phe Ile
355 360 365

Phe Ala His Pro Pro Gln Pro Gln Cys Ser Phe Gln Ser Leu Gly Leu
370 375 380

Arg
385

<210> 105
<211> 438
<212> PRT
<213> Homo sapien

<400> 105

Met Asp Glu Ile Glu Lys Tyr Gln Glu Val Glu Glu Asp Gln Asp Pro
1 5 10 15

Ser Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Glu Pro Glu
20 25 30

Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr
35 40 45

Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr Ser Ser Ala Val Tyr Ser
50 55 60

Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu Asp Val Asp Arg Ile Lys
65 70 75 80

Lys Asp Gln Glu Glu Glu Glu Asp Gln Gly Pro Pro Cys Pro Arg Leu
85 90 95

Ser Arg Glu Leu Leu Glu Val Val Glu Pro Glu Val Leu Gln Asp Ser
100 105 110

Leu Asp Arg Cys Tyr Ser Thr Pro Ser Ser Cys Leu Glu Gln Pro Asp
115 120 125

Ser Cys Gln Pro Tyr Gly Ser Ser Phe Tyr Ala Leu Glu Glu Lys His
130 135 140

Val Gly Phe Ser Leu Asp Val Gly Glu Ile Glu Lys Lys Gly Lys Gly
145 150 155 160

Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys Glu Arg Arg Arg Gly Arg
165 170 175

Lys Glu Gly Glu Glu Asp Gln Asn Pro Pro Cys Pro Arg Leu Ser Arg
180 185 190

Glu Leu Leu Asp Glu Lys Gly Pro Glu Val Leu Gln Asp Ser Leu Asp
195 200 205

Arg Cys Tyr Ser Thr Pro Ser Gly Cys Leu Glu Leu Thr Asp Ser Cys
210 215 220

Gln Pro Tyr Arg Ser Ala Phe Tyr Val Leu Glu Gln Gln Arg Val Gly
225 230 235 240

Leu Ala Val Asp Met Asp Glu Ile Glu Lys Tyr Gln Glu Val Glu Glu

245 250 255

Asp Gln Asp Pro Ser Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu
260 265 270

Lys Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr
275 280 285

Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr Ser Ser
290 295 300

Ala Val Tyr Ser Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu Asp Val
305 310 315 320

Asp Lys Ile Glu Lys Lys Gly Lys Gly Lys Lys Arg Arg Gly Arg Arg
325 330 335

Ser Lys Lys Glu Arg Arg Arg Gly Ser Lys Glu Gly Glu Glu Asp Gln
340 345 350

Asn Pro Pro Cys Pro Arg Leu Ser Gly Val Leu Met Glu Val Glu Glu
355 360 365

Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser
370 375 380

Met Tyr Phe Glu Leu Pro Asp Ser Phe Gln His Tyr Arg Ser Val Phe
385 390 395 400

Tyr Ser Phe Glu Glu Gln His Ile Ser Phe Ala Leu Asp Val Asp Asn
405 410 415

Arg Phe Leu Thr Leu Met Gly Thr Ser Leu His Leu Val Phe Gln Met
420 425 430

Gly Val Ile Phe Pro Gln
435

<210> 106
<211> 334
<212> PRT
<213> Homo sapien

<400> 106

Ser Leu Lys Ser Cys Arg Thr His Trp Ile Asp Val Ile Gln Leu Leu
1 5 10 15

Pro Val Val Leu Asn Ser Leu Thr Pro Ala Ser Pro Met Glu Val Pro
20 25 30

Phe Met His Trp Arg Lys Asn Met Leu Ala Phe Leu Leu Thr Trp Glu
35 40 45

Lys Leu Lys Arg Arg Gly Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln
50 55 60

Arg Arg Lys Glu Arg Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln Asn
65 70 75 80

Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly Pro
85 90 95

Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly
100 105 110

Cys Leu Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe Tyr
115 120 125

Val Leu Glu Gln Gln Arg Val Gly Leu Ala Val Asp Met Asp Glu Ile
130 135 140

Glu Lys Tyr Gln Glu Val Glu Glu Asp Gln Asp Pro Ser Cys Pro Arg
145 150 155 160

Leu Ser Arg Glu Leu Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp
165 170 175

Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro
180 185 190

Asp Leu Gly Gln Pro Tyr Ser Ser Ala Val Tyr Ser Leu Glu Glu Gln
195 200 205

Tyr Leu Gly Leu Ala Leu Asp Val Asp Lys Ile Glu Lys Lys Gly Lys
210 215 220

Gly Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys Glu Arg Arg Arg Gly
225 230 235 240

Ser Lys Glu Gly Glu Glu Asp Gln Asn Pro Pro Cys Pro Arg Leu Ser
245 250 255

Gly Val Leu Met Glu Val Glu Glu Pro Glu Val Leu Gln Asp Ser Leu
260 265 270

Asp Arg Cys Tyr Ser Thr Pro Ser Met Tyr Phe Glu Leu Pro Asp Ser
275 280 285

Phe Gln His Tyr Arg Ser Val Phe Tyr Ser Phe Glu Glu Gln His Ile
290 295 300

Ser Phe Ala Leu Asp Val Asp Asn Arg Phe Leu Thr Leu Met Gly Thr
305 310 315 320

Ser Leu His Leu Val Phe Gln Met Gly Val Ile Phe Pro Gln
325 330

<210> 107
<211> 140
<212> PRT
<213> Homo sapien

<400> 107

Met Arg Arg Arg Ser His Ser Thr Arg Leu Ser Ala Gly Gly Ser Trp
1 5 10 15

Ser Pro His His Leu Leu Ser Pro Ser Tyr Ser Val Lys Ser Arg Asp
20 25 30

Arg Lys Met Val Gly Asp Val Thr Gly Ala Gln Ala Tyr Ala Ser Thr
35 40 45

Ala Lys Cys Leu Asn Ile Trp Ala Leu Ile Leu Gly Ile Leu Met Thr
50 55 60

Ile Gly Phe Ile Leu Leu Leu Val Phe Gly Ser Val Thr Val Ser His
65 70 75 80

Ile Met Phe Gln Asn Asn Thr Gly Lys Thr Gly Leu Leu Val Ala Ala
85 90 95

His Ser Leu Gln Pro Leu His Ser Thr Val Gln Cys Trp Pro Cys Asn
100 105 110

Ala Val Ala Val Ala Pro Ala Pro Leu Val Leu Pro Leu Asn Thr Ala
115 120 125

Val Tyr Thr His Thr Pro Val Tyr Ser Val Ile Gln
130 135 140

<210> 108
<211> 114
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (53)..(53)
<223> X=any amino acid

<220>
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<222> (82)..(82)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (94)..(94)
<223> X=any amino acid

<400> 108

Gly Gln Glu Asp Gly Trp Arg Arg Asp Arg Gly Pro Gly Leu Cys Leu
1 5 10 15

His Arg Gln Val Pro Glu His Leu Gly Pro Asp Ser Gly His Pro His
20 25 30

Asp His Trp Ile His Pro Val Thr Gly Ile Arg Leu Cys Asp Ser Leu
35 40 45

Pro Tyr Tyr Val Xaa Asp Asn Thr Gly Lys Thr Gly Leu Leu Val Ala
50 55 60

Ala His Ser Leu Gln Pro Leu His Ser Thr Val Gln Cys Trp Pro Cys
65 70 75 80

Thr Xaa Gly Cys Cys Pro Cys Pro Leu Gly Pro Ala Pro Xaa Tyr Ser
85 90 95

Ser Leu Tyr Pro His Thr Cys Leu Gln Cys His Ser Ile Lys Arg Thr
100 105 110

Cys Leu

<210> 109
<211> 182

<212> PRT
<213> Homo sapien

<400> 109

Met Glu Glu Met Lys Asn Glu Ala Glu Thr Thr Ser Met Val Ser Met
1 5 10 15

Pro Leu Tyr Ala Val Met Tyr Pro Val Phe Asn Glu Leu Glu Arg Val
20 25 30

Asn Leu Ser Ala Ala Gln Thr Leu Arg Ala Ala Phe Ile Lys Ala Glu
35 40 45

Lys Glu Asn Pro Gly Leu Thr Gln Asp Ile Ile Met Lys Ile Leu Glu
50 55 60

Lys Lys Ser Val Glu Val Asn Phe Thr Glu Ser Leu Leu Arg Met Ala
65 70 75 80

Ala Asp Asp Val Glu Glu Tyr Met Ile Glu Arg Pro Glu Pro Glu Phe
85 90 95

Gln Asp Leu Asn Glu Lys Ala Arg Ala Leu Lys Gln Ile Leu Ser Lys
100 105 110

Ile Pro Asp Glu Ile Asn Asp Arg Val Arg Phe Leu Gln Thr Ile Lys
115 120 125

Ala Leu Glu His Gln Lys Lys Glu Phe Val Lys Tyr Ser Lys Ser Phe
130 135 140

Ser Asp Thr Leu Lys Thr Tyr Phe Lys Asp Gly Lys Ala Ile Asn Val
145 150 155 160

Phe Val Ser Ala Asn Arg Leu Ile His Gln Thr Asn Leu Ile Leu Gln
165 170 175

Thr Phe Lys Thr Val Ala
180

<210> 110
<211> 141
<212> PRT
<213> Homo sapien

<400> 110

Met Arg Met Thr Met Glu Glu Met Lys Asn Glu Ala Glu Thr Thr Ser

1 5 10 15

Met Val Ser Met Pro Leu Tyr Ala Val Met Tyr Pro Val Phe Asn Glu
20 25 30

Leu Glu Arg Val Asn Leu Ser Ala Ala Gln Thr Leu Arg Ala Ala Phe
35 40 45

Ile Lys Ala Glu Lys Glu Asn Pro Gly Leu Thr Gln Asp Ile Ile Met
50 55 60

Lys Ile Leu Glu Lys Lys Ser Val Glu Val Asn Phe Thr Glu Ser Leu
65 70 75 80

Leu Arg Met Ala Ala Asp Asp Val Glu Glu Tyr Met Ile Glu Arg Pro
85 90 95

Glu Pro Glu Phe Gln Asp Leu Asn Glu Lys Ala Arg Ala Leu Lys Gln
100 105 110

Ile Leu Ser Lys Ile Pro Asp Glu Ile Asn Asp Arg Val Arg Phe Leu
115 120 125

Gln Thr Ile Lys His Leu Asn Thr Lys Arg Lys Asn Leu
130 135 140

<210> 111
<211> 132
<212> PRT
<213> Homo sapien

<400> 111

Gly Arg Val Pro Leu Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys
1 5 10 15

Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser
20 25 30

Tyr Thr Gly Ser Ser Gly Arg Pro Gly Arg Tyr Glu Leu Phe Lys Ser
35 40 45

Ser Pro His Ser Leu Phe Pro Glu Lys Met Val Ser Ser Cys Leu Asp
50 55 60

Ala His Thr Gly Ile Ser His Glu Asp Leu Ile Gln Val Gly Gly Pro
65 70 75 80

Pro Ile Ser Leu Gln Ile His Asp Ser Pro Ala Leu Ala Ser Ala Ser
85 90 95

Pro Pro Leu Ser Pro Val Pro Pro Leu Tyr Val Val Glu Arg Ala Lys
100 105 110

Ser Gln Ser Cys Val Thr Gly Asp Ser His Phe Pro Cys Leu Ser Ile
115 120 125

Ser Phe Phe Tyr
130

<210> 112
<211> 277
<212> PRT
<213> Homo sapien

<400> 112

Met Glu Leu Asp Leu Ser Pro Pro His Leu Ser Ser Ser Pro Glu Asp
1 5 10 15

Leu Cys Pro Ala Pro Gly Thr Pro Pro Gly Thr Pro Arg Pro Pro Asp
20 25 30

Thr Pro Leu Pro Glu Glu Val Lys Arg Ser Gln Pro Leu Leu Ile Pro
35 40 45

Thr Thr Gly Arg Lys Leu Arg Glu Glu Glu Arg Arg Ala Thr Ser Leu
50 55 60

Pro Ser Ile Pro Asn Pro Phe Pro Glu Leu Cys Ser Pro Pro Ser Gln
65 70 75 80

Ser Pro Ile Leu Gly Gly Pro Ser Ser Ala Arg Gly Leu Leu Pro Arg
85 90 95

Asp Ala Ser Arg Pro His Val Val Lys Val Tyr Ser Glu Asp Gly Ala
100 105 110

Cys Arg Ser Val Glu Val Ala Ala Gly Ala Thr Ala Arg His Val Cys
115 120 125

Glu Met Leu Val Gln Arg Ala His Ala Leu Ser Asp Glu Thr Trp Gly
130 135 140

Leu Val Glu Cys His Pro His Leu Ala Leu Glu Arg Gly Leu Glu Asp

145 150 155 160

His Glu Ser Val Val Glu Val Gln Ala Ala Trp Pro Val Gly Gly Asp
165 170 175

Ser Arg Phe Val Phe Arg Lys Asn Phe Ala Lys Tyr Glu Leu Phe Lys
180 185 190

Ser Ser Pro His Ser Leu Phe Pro Glu Lys Met Val Ser Ser Cys Leu
195 200 205

Asp Ala His Thr Gly Ile Ser His Glu Asp Leu Ile Gln Val Gly Gly
210 215 220

Pro Pro Ile Ser Leu Gln Ile His Asp Ser Pro Ala Leu Ala Ser Ala
225 230 235 240

Ser Pro Pro Leu Ser Pro Val Pro Pro Leu Tyr Val Val Glu Arg Ala
245 250 255

Lys Ser Gln Ser Cys Val Thr Gly Asp Ser His Phe Pro Cys Leu Ser
260 265 270

Ile Ser Phe Phe Tyr
275

<210> 113
<211> 155
<212> PRT
<213> Homo sapien

<400> 113

Met Phe Leu Val Leu Ala Arg Ala Cys Gln Leu Leu Gln Ile Cys Leu
1 5 10 15

Lys Glu Ser Leu Phe Ala Tyr Leu Gly Leu Ser Pro Pro Ser Tyr Thr
20 25 30

Phe Pro Ala Pro Ala Ala Val Ile Pro Thr Glu Ala Ala Ile Tyr Gln
35 40 45

Pro Ser Val Ile Leu Asn Pro Arg Ala Leu Gln Pro Ser Thr Ala Tyr
50 55 60

Tyr Pro Ala Gly Thr Gln Leu Phe Met Asn Tyr Thr Ala Tyr Tyr Pro
65 70 75 80

Ser Pro Pro Gly Ser Pro Asn Ser Leu Gly Tyr Phe Pro Thr Ala Ala
85 90 95

Asn Leu Ser Gly Val Pro Pro Gln Pro Gly Thr Val Val Arg Met Gln
100 105 110

Gly Leu Ala Tyr Asn Thr Gly Val Lys Glu Ile Leu Asn Phe Phe Gln
115 120 125

Gly Tyr Gln Tyr Ala Thr Glu Asp Gly Leu Ile His Thr Asn Asp Gln
130 135 140

Ala Arg Thr Leu Pro Lys Glu Trp Val Cys Ile
145 150 155

<210> 114
<211> 103
<212> PRT
<213> Homo sapien

<400> 114

Met Val Lys Leu Asn Ser Asn Pro Ser Glu Lys Gly Thr Lys Pro Pro
1 5 10 15

Ser Val Glu Asp Gly Phe Gln Thr Val Pro Leu Ile Thr Pro Leu Glu
20 25 30

Val Asn His Leu Gln Leu Pro Ala Pro Glu Lys Val Ile Val Lys Thr
35 40 45

Arg Thr Glu Tyr Gln Pro Glu Gln Lys Asn Lys Gly Lys Phe Arg Val
50 55 60

Pro Lys Ile Ala Glu Phe Thr Val Thr Ile Leu Val Ser Leu Ala Leu
65 70 75 80

Ala Phe Leu Ala Cys Ile Val Phe Leu Val Val Tyr Lys Ala Phe Thr
85 90 95

Tyr Leu Lys Glu Leu Asn Ser
100

<210> 115
<211> 117
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (114)..(114)
<223> X=any amino acid

<400> 115

Pro Pro Thr Ser Ala Ala Gln Ser Gly Lys Lys Gly Val Arg Met Val
1 5 10 15

Lys Leu Asn Ser Asn Pro Ser Glu Lys Gly Thr Lys Pro Pro Ser Val
20 25 30

Glu Asp Gly Phe Gln Thr Val Pro Leu Ile Thr Pro Leu Glu Val Asn
35 40 45

His Leu Gln Leu Pro Ala Pro Glu Lys Val Ile Val Lys Thr Arg Thr
50 55 60

Glu Tyr Gln Pro Glu Gln Lys Asn Lys Gly Lys Phe Arg Val Pro Lys
65 70 75 80

Ile Ala Glu Phe Thr Val Thr Ile Leu Val Ser Leu Ala Leu Ala Phe
85 90 95

Leu Ala Cys Ile Val Phe Leu Val Val Tyr Lys Ala Phe Thr Tyr Leu
100 105 110

Lys Xaa Leu Asn Ser
115

<210> 116
<211> 454
<212> PRT
<213> Homo sapien

<400> 116

Met Pro Glu Phe Leu Glu Asp Pro Ser Val Leu Thr Lys Asp Lys Leu
1 5 10 15

Lys Ser Glu Leu Val Ala Asn Asn Val Thr Leu Pro Ala Gly Glu Gln
20 25 30

Arg Lys Asp Val Tyr Val Gln Leu Tyr Leu Gln His Leu Thr Ala Arg
35 40 45

Asn Arg Pro Pro Leu Pro Ala Gly Thr Asn Ser Lys Gly Pro Pro Asp
50 55 60

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Phe Ser Ser Asp Glu Glu Arg Glu Pro Thr Pro Val Leu Gly Ser Gly
65                  70                  75                  80

Ala Ala Ala Ala Gly Arg Ser Arg Ala Ala Val Gly Arg Lys Ala Thr
                85                  90                  95

Lys Lys Thr Asp Lys Pro Arg Gln Glu Asp Lys Asp Asp Leu Asp Val
            100                 105                 110

Thr Glu Leu Thr Asn Glu Asp Leu Leu Asp Gln Leu Val Lys Tyr Gly
        115                 120                 125

Val Asn Pro Gly Pro Ile Val Gly Thr Thr Arg Lys Leu Tyr Glu Lys
    130                 135                 140

Lys Leu Leu Lys Leu Arg Glu Gln Gly Thr Glu Ser Arg Ser Ser Thr
145                 150                 155                 160

Pro Leu Pro Thr Ile Ser Ser Ser Ala Glu Asn Thr Arg Gln Asn Gly
                165                 170                 175

Ser Asn Asp Ser Asp Arg Tyr Ser Asp Asn Glu Glu Asp Ser Lys Ile
            180                 185                 190

Glu Leu Lys Leu Glu Lys Arg Glu Pro Leu Lys Gly Arg Ala Lys Thr
        195                 200                 205

Pro Val Thr Leu Lys Gln Arg Arg Val Glu His Asn Gln Ser Tyr Ser
    210                 215                 220

Gln Ala Gly Ile Thr Glu Thr Glu Trp Thr Ser Gly Ser Ser Lys Gly
225                 230                 235                 240

Gly Pro Leu Gln Ala Leu Thr Arg Glu Ser Thr Arg Gly Ser Arg Arg
                245                 250                 255

Thr Pro Arg Lys Arg Val Glu Thr Ser Glu His Phe Arg Ile Asp Gly
            260                 265                 270

Pro Val Ile Ser Glu Ser Thr Pro Ile Ala Glu Thr Ile Met Ala Ser
        275                 280                 285

Ser Asn Glu Ser Leu Val Val Asn Arg Val Thr Gly Asn Phe Lys His
    290                 295                 300
```

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Ala Ser Pro Ile Leu Pro Ile Thr Glu Phe Ser Asp Ile Pro Arg Arg
305                 310                 315                 320

Ala Pro Lys Lys Pro Leu Thr Arg Ala Glu Val Gly Glu Lys Thr Glu
                325                 330                 335

Glu Arg Arg Val Glu Arg Asp Ile Leu Lys Glu Met Phe Pro Tyr Glu
            340                 345                 350

Ala Ser Thr Pro Thr Gly Ile Ser Ala Ser Cys Arg Arg Pro Ile Lys
        355                 360                 365

Gly Ala Ala Gly Arg Pro Leu Glu Leu Ser Asp Phe Arg Met Glu Glu
    370                 375                 380

Ser Phe Ser Ser Lys Tyr Val Pro Lys Tyr Val Pro Leu Ala Asp Val
385                 390                 395                 400

Lys Ser Glu Lys Thr Lys Lys Gly Arg Ser Ile Pro Val Trp Ile Lys
                405                 410                 415

Ile Leu Leu Phe Val Val Val Ala Val Phe Leu Phe Leu Val Tyr Gln
            420                 425                 430

Ala Met Glu Thr Asn Gln Val Asn Pro Phe Ser Asn Phe Leu His Val
        435                 440                 445

Asp Pro Arg Lys Ser Asn
    450

<210>  117
<211>  380
<212>  PRT
<213>  Homo sapien

<400>  117

Met Glu Leu Gly Arg Pro Leu Leu Glu Val Leu Ala Ser Ala Leu Ser
1               5                   10                  15

Pro Ala Ser Pro Pro Leu Leu Pro Pro Asp Tyr Ile Leu Cys Val Val
            20                  25                  30

Ser Leu Leu Gln Met Lys Asp Leu Gly Ala Glu His Leu Ala Gly His
        35                  40                  45

Glu Gly Val Gln Leu Leu Gly Leu Leu Asn Val Tyr Leu Glu Gln Glu
```

50 55 60

Glu Arg Phe Gln Pro Arg Glu Lys Gly Leu Ser Leu Ile Glu Ala Thr
65 70 75 80

Pro Glu Asn Asp Asn Thr Leu Cys Pro Gly Leu Arg Asn Ala Lys Val
85 90 95

Glu Asp Leu Arg Ser Leu Ala Asn Phe Phe Gly Ser Cys Thr Glu Thr
100 105 110

Phe Val Leu Ala Val Asn Ile Leu Asp Arg Phe Leu Ala Leu Met Lys
115 120 125

Val Lys Pro Lys His Leu Ser Cys Ile Gly Val Cys Ser Phe Leu Leu
130 135 140

Ala Ala Arg Ile Val Glu Glu Asp Cys Asn Ile Pro Ser Thr His Asp
145 150 155 160

Val Ile Arg Ile Ser Gln Cys Lys Cys Thr Ala Ser Asp Ile Lys Arg
165 170 175

Met Glu Lys Ile Ile Ser Glu Lys Leu His Tyr Glu Leu Glu Ala Thr
180 185 190

Thr Ala Leu Asn Phe Leu His Leu Tyr His Thr Ile Ile Leu Cys His
195 200 205

Thr Ser Glu Arg Lys Glu Ile Leu Ser Leu Asp Lys Leu Glu Ala Gln
210 215 220

Leu Lys Ala Cys Asn Cys Arg Leu Ile Phe Ser Lys Ala Lys Pro Ser
225 230 235 240

Val Leu Ala Leu Cys Leu Leu Asn Leu Glu Val Glu Thr Leu Lys Ser
245 250 255

Val Glu Leu Leu Glu Ile Leu Leu Leu Val Lys Lys His Ser Lys Ile
260 265 270

Asn Asp Thr Glu Phe Phe Tyr Trp Arg Glu Leu Val Ser Lys Cys Leu
275 280 285

Ala Glu Tyr Ser Ser Pro Glu Cys Cys Lys Pro Asp Leu Lys Lys Leu
290 295 300

Val Trp Ile Val Ser Arg Arg Thr Ala Gln Asn Leu His Asn Ser Tyr
305 310 315 320

Tyr Ser Val Pro Glu Leu Pro Thr Ile Pro Glu Gly Gly Cys Phe Asp
325 330 335

Glu Ser Glu Ser Glu Asp Ser Cys Glu Asp Met Ser Cys Gly Glu Glu
340 345 350

Ser Leu Ser Ser Ser Pro Pro Ser Asp Gln Glu Cys Thr Phe Phe Phe
355 360 365

Asn Phe Lys Val Ala Gln Thr Leu Cys Phe Pro Ser
370 375 380

<210> 118
<211> 227
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> X=any amino acid

<400> 118

Met Leu Leu Glu Arg Xaa Gln Cys Asp Gly Xaa Arg Arg Gly Arg Gly
1 5 10 15

Thr Ala Ser Asp Ile Lys Arg Met Glu Lys Ile Ile Ser Glu Lys Leu
20 25 30

His Tyr Glu Leu Glu Ala Thr Thr Ala Leu Asn Phe Leu His Leu Tyr
35 40 45

His Thr Ile Ile Leu Cys His Thr Ser Glu Arg Lys Glu Ile Leu Ser
50 55 60

Leu Asp Lys Leu Glu Ala Gln Leu Lys Ala Cys Asn Cys Arg Leu Ile
65 70 75 80

Phe Ser Lys Ala Lys Pro Ser Val Leu Ala Leu Cys Leu Leu Asn Leu
85 90 95

Glu Val Glu Thr Leu Lys Ser Val Glu Leu Leu Glu Ile Leu Leu Leu
100 105 110

Val Lys Lys His Ser Lys Ile Asn Asp Thr Glu Phe Phe Tyr Trp Arg
115 120 125

Glu Leu Val Ser Lys Cys Leu Ala Glu Tyr Ser Ser Pro Glu Cys Cys
130 135 140

Lys Pro Asp Leu Lys Lys Leu Val Trp Ile Val Ser Arg Arg Thr Ala
145 150 155 160

Gln Asn Leu His Asn Ser Tyr Tyr Ser Val Pro Glu Leu Pro Thr Ile
165 170 175

Pro Glu Gly Gly Cys Phe Asp Glu Ser Glu Ser Glu Asp Ser Cys Glu
180 185 190

Asp Met Ser Cys Gly Glu Glu Ser Leu Ser Ser Ser Pro Pro Ser Asp
195 200 205

Gln Glu Cys Thr Phe Phe Phe Asn Phe Lys Val Ala Gln Thr Leu Cys
210 215 220

Phe Pro Ser
225

<210> 119
<211> 227
<212> PRT
<213> Homo sapien

<400> 119

Met Leu Leu Glu Arg Arg Gln Cys Asp Gly Leu Arg Arg Gly Arg Gly
1 5 10 15

Thr Ala Ser Asp Ile Lys Arg Met Glu Lys Ile Ile Ser Glu Lys Leu
20 25 30

His Tyr Glu Leu Glu Ala Thr Thr Ala Leu Asn Phe Leu His Leu Tyr
35 40 45

His Thr Ile Ile Leu Cys His Thr Ser Glu Arg Lys Glu Ile Leu Ser
50 55 60

```
Leu Asp Lys Leu Glu Ala Gln Leu Lys Ala Cys Asn Cys Arg Leu Ile
65                  70                  75                  80

Phe Ser Lys Ala Lys Pro Ser Val Leu Ala Leu Cys Leu Leu Asn Leu
                85                  90                  95

Glu Val Glu Thr Leu Lys Ser Val Glu Leu Leu Glu Ile Leu Leu Leu
            100                 105                 110

Val Lys Lys His Ser Lys Ile Asn Asp Thr Glu Phe Phe Tyr Trp Arg
        115                 120                 125

Glu Leu Val Ser Lys Cys Leu Ala Glu Tyr Ser Ser Pro Glu Cys Cys
    130                 135                 140

Lys Pro Asp Leu Lys Lys Leu Val Trp Ile Val Ser Arg Arg Thr Ala
145                 150                 155                 160

Gln Asn Leu His Asn Ser Tyr Tyr Ser Val Pro Glu Leu Pro Thr Ile
                165                 170                 175

Pro Glu Gly Gly Cys Phe Asp Glu Ser Glu Ser Glu Asp Ser Cys Glu
            180                 185                 190

Asp Met Ser Cys Gly Glu Glu Ser Leu Ser Ser Ser Pro Pro Ser Asp
        195                 200                 205

Gln Glu Cys Thr Phe Phe Phe Asn Phe Lys Val Ala Gln Thr Leu Cys
    210                 215                 220

Phe Pro Ser
225
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<210> 120
<211> 101
<212> PRT
<213> Homo sapien

<400> 120

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Met Cys Cys Trp Gln Ala Thr Phe Phe Lys Ala Leu Ser Glu Thr Leu
1               5                   10                  15

Ile Phe Gly Val Ser Phe Gln Glu Thr Phe Leu Trp Arg Glu Asn Glu
            20                  25                  30
```

Tyr Glu Asp Asn Phe Gln Leu Ile Ile Trp Val Thr Gln Asn Arg Val
35 40 45

Tyr Gly Tyr Arg Ile Asp Phe Leu Ile Met Ala Ser Asp Val Ala Leu
50 55 60

Gly Lys Gly Ala Leu Cys Thr Val Cys Ala Cys Met Cys Val Tyr Leu
65 70 75 80

Tyr Lys Phe Val Ser Phe Gly Met Thr Val Cys Leu Ser Arg Lys Pro
85 90 95

Ile Asn Ser Lys Phe
100

<210> 121
<211> 392
<212> PRT
<213> Homo sapien

<400> 121

Arg Leu Ala Leu Ala Leu Cys Pro Gln Leu Ile Leu Pro His Val Asp
1 5 10 15

Ile Gln Leu Lys Tyr Phe Asp Leu Gly Leu Pro Asn Arg Asp Gln Thr
20 25 30

Asp Asp Gln Val Thr Ile Asp Ser Ala Leu Ala Thr Gln Lys Tyr Ser
35 40 45

Val Ala Val Lys Cys Ala Thr Ile Thr Pro Asp Glu Ala Arg Val Glu
50 55 60

Glu Phe Lys Leu Lys Lys Met Trp Lys Ser Pro Asn Gly Thr Ile Arg
65 70 75 80

Asn Ile Leu Gly Gly Thr Val Phe Arg Glu Pro Ile Ile Cys Lys Asn
85 90 95

Ile Pro Arg Leu Val Pro Gly Trp Thr Lys Pro Ile Thr Ile Gly Arg
100 105 110

His Ala His Gly Asp Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg
115 120 125

Ala Gly Thr Phe Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val
130 135 140

Lys Glu Trp Glu Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly
145 150 155 160

Met Tyr Asn Thr Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe
165 170 175

Gln Tyr Ala Ile Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn
180 185 190

Thr Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu
195 200 205

Ile Phe Asp Lys His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp
210 215 220

Tyr Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser
225 230 235 240

Ser Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln
245 250 255

Ser Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser
260 265 270

Val Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His
275 280 285

Gly Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr
290 295 300

Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu
305 310 315 320

His Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln
325 330 335

Met Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr
340 345 350

Lys Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn
355 360 365

Glu His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn
370 375 380

Leu Asp Arg Ala Leu Gly Arg Gln
385 390

<210> 122
<211> 438
<212> PRT
<213> Homo sapien

<400> 122

Met Ala Cys Arg Leu Leu Ile Leu Pro Phe Val Val Met Ser Leu Ser
1 5 10 15

His Trp Gly Asp Ala Leu Leu Leu Ala Leu Cys Pro Gln Leu Ile Leu
20 25 30

Pro His Val Asp Ile Gln Leu Lys Tyr Phe Asp Leu Gly Leu Pro Asn
35 40 45

Arg Asp Gln Thr Asp Asp Gln Val Thr Ile Asp Ser Ala Leu Ala Thr
50 55 60

Gln Lys Tyr Ser Val Ala Val Lys Cys Ala Thr Ile Thr Pro Asp Glu
65 70 75 80

Ala Arg Val Glu Glu Phe Lys Leu Lys Lys Met Trp Lys Ser Pro Asn
85 90 95

Gly Thr Ile Arg Asn Ile Leu Gly Gly Thr Val Phe Arg Glu Pro Ile
100 105 110

Ile Cys Lys Asn Ile Pro Arg Leu Val Pro Gly Trp Thr Lys Pro Ile
115 120 125

Thr Ile Gly Arg His Ala His Gly Asp Gln Tyr Lys Ala Thr Asp Phe
130 135 140

Val Ala Asp Arg Ala Gly Thr Phe Lys Met Val Phe Thr Pro Lys Asp
145 150 155 160

Gly Ser Gly Val Lys Glu Trp Glu Val Tyr Asn Phe Pro Ala Gly Gly
165 170 175

Val Gly Met Gly Met Tyr Asn Thr Asp Glu Ser Ile Ser Gly Phe Ala
180 185 190

His Ser Cys Phe Gln Tyr Ala Ile Gln Lys Lys Trp Pro Leu Tyr Met

195 200 205

Ser Thr Lys Asn Thr Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys Asp
210 215 220

Ile Phe Gln Glu Ile Phe Asp Lys His Tyr Lys Thr Asp Phe Asp Lys
225 230 235 240

Asn Lys Ile Trp Tyr Glu His Arg Leu Ile Asp Asp Met Val Ala Gln
245 250 255

Val Leu Lys Ser Ser Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp
260 265 270

Gly Asp Val Gln Ser Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly
275 280 285

Leu Met Thr Ser Val Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala
290 295 300

Glu Ala Ala His Gly Thr Val Thr Arg His Tyr Arg Glu His Gln Lys
305 310 315 320

Gly Arg Pro Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr
325 330 335

Arg Gly Leu Glu His Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile
340 345 350

Arg Phe Ala Gln Met Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser
355 360 365

Gly Ala Met Thr Lys Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn
370 375 380

Val Lys Leu Asn Glu His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr
385 390 395 400

Ile Lys Ser Asn Leu Asp Ser Ser Pro Gly Gln Ala Val Gly Gly Gly
405 410 415

Ala Thr His Gly Cys Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro
420 425 430

Pro Glu Arg Gly Arg Gly
435

<210> 123
<211> 292
<212> PRT
<213> Homo sapien

<400> 123

Pro Gly His Pro Pro Thr Gly Ala Pro Arg Leu Ala Ile Leu Leu Ser
1 5 10 15

Leu Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg Ala Gly Thr Phe
20 25 30

Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val Lys Glu Trp Glu
35 40 45

Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly Met Tyr Asn Thr
50 55 60

Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe Gln Tyr Ala Ile
65 70 75 80

Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn Thr Ile Leu Lys
85 90 95

Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile Phe Asp Lys
100 105 110

His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg
115 120 125

Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser Gly Gly Phe
130 135 140

Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu
145 150 155 160

Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys
165 170 175

Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr
180 185 190

Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro
195 200 205

Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys
210 215 220

Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys
225 230 235 240

Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala
245 250 255

Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu
260 265 270

Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Arg Ala
275 280 285

Leu Gly Arg Gln
290

<210> 124
<211> 417
<212> PRT
<213> Homo sapien

<400> 124

Met Lys Asn Phe Arg Thr Pro Val Trp Leu Cys Cys Cys Leu Gly Phe
1 5 10 15

Lys Phe Trp Leu Lys Asp Gly Gly Cys Ser Gly Thr Thr Ile Ile Ser
20 25 30

Val Leu Thr Glu Phe Lys Leu Lys Lys Met Trp Lys Ser Pro Asn Gly
35 40 45

Thr Ile Arg Asn Ile Leu Gly Gly Thr Val Phe Arg Glu Pro Ile Ile
50 55 60

Cys Lys Asn Ile Pro Arg Leu Val Pro Gly Trp Thr Lys Pro Ile Thr
65 70 75 80

Ile Gly Arg His Ala His Gly Asp Gln Val Gly Gln Gly Gly Glu Gly
85 90 95

Ile His Arg Pro Gly His Pro Pro Thr Gly Ala Pro Arg Leu Ala Ile
100 105 110

Leu Leu Ser Leu Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg Ala
115 120 125

Gly Thr Phe Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val Lys
130 135 140

Glu Trp Glu Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly Met
145 150 155 160

Tyr Asn Thr Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe Gln
165 170 175

Tyr Ala Ile Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn Thr
180 185 190

Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile
195 200 205

Phe Asp Lys His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr
210 215 220

Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser
225 230 235 240

Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser
245 250 255

Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val
260 265 270

Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly
275 280 285

Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser
290 295 300

Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His
305 310 315 320

Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met
325 330 335

Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys
340 345 350

Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu
355 360 365

His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu
370 375 380

Asp Ser Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His Gly Cys
385 390 395 400

Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly Arg
405 410 415

Gly

<210> 125
<211> 255
<212> PRT
<213> Homo sapien

<400> 125

Lys Pro Thr Met Gly Val Ser Arg Thr Ser Ser Arg Arg Ser Leu Thr
1 5 10 15

Ser Lys Ala Ser Ser Met Tyr Ser Val Ala Phe Leu Pro Phe Pro Pro
20 25 30

Cys Cys Ser His Pro Thr Leu Gly Arg Ser Leu Leu Glu Cys Ile Trp
35 40 45

Leu Ser Ser Glu Ala Gln Gly Gly Ile Pro Asn Leu Ser Ala Phe Cys
50 55 60

Pro Leu Pro Ile Thr Asp Leu Phe Thr Pro Arg His Tyr Lys Thr Asp
65 70 75 80

Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg Leu Ile Asp Asp Met
85 90 95

Val Ala Gln Val Leu Lys Ser Ser Gly Gly Phe Val Trp Ala Cys Lys
100 105 110

Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu Ala Gln Gly Phe Gly
115 120 125

Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys Pro Asp Gly Lys Thr
130 135 140

Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr Arg His Tyr Arg Glu

145 150 155 160

His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe
165 170 175

Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys Leu Asp Gly Asn Gln
180 185 190

Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys Val Cys Val Glu Thr
195 200 205

Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala Gly Cys Ile His Gly
210 215 220

Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu Asn Thr Thr Asp Phe
225 230 235 240

Leu Asp Thr Ile Lys Ser Asn Leu Asp Arg Ala Leu Gly Arg Gln
245 250 255

<210> 126
<211> 289
<212> PRT
<213> Homo sapien

<400> 126

Met Ser Thr Lys Asn Thr Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys
1 5 10 15

Asp Ile Phe Gln Glu Ile Phe Asp Asn Lys Ala Ser Ser Met Tyr Ser
20 25 30

Val Ala Phe Leu Pro Phe Pro Pro Cys Cys Ser His Pro Thr Leu Gly
35 40 45

Arg Ser Leu Leu Glu Cys Ile Trp Leu Ser Ser Glu Ala Gln Gly Gly
50 55 60

Ile Pro Asn Leu Ser Ala Phe Cys Pro Leu Pro Ile Thr Asp Leu Phe
65 70 75 80

Thr Pro Arg His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr
85 90 95

Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser
100 105 110

Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser
115 120 125

Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val
130 135 140

Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly
145 150 155 160

Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser
165 170 175

Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His
180 185 190

Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met
195 200 205

Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys
210 215 220

Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu
225 230 235 240

His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu
245 250 255

Asp Ser Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His Gly Cys
260 265 270

Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly Arg
275 280 285

Gly

<210> 127
<211> 167
<212> PRT
<213> Homo sapien

<400> 127

Val Glu Pro Arg Thr Met Ala Ala Thr Ile Leu Gly Cys Arg Gly Gln
1 5 10 15

Gln Gly Ser Ala Gly Trp Pro Gln Glu Arg Arg Gly Pro Glu Arg Lys

20 25 30

Ala Phe Tyr Pro Pro Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val
35 40 45

Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly
50 55 60

Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser
65 70 75 80

Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His
85 90 95

Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met
100 105 110

Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys
115 120 125

Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu
130 135 140

His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu
145 150 155 160

Asp Arg Ala Leu Gly Arg Gln
165

<210> 128
<211> 188
<212> PRT
<213> Homo sapien

<400> 128

Met Ala Ala Thr Ile Leu Gly Cys Arg Gly Gln Gln Gly Ser Ala Gly
1 5 10 15

Trp Pro Gln Glu Arg Arg Gly Pro Glu Arg Lys Ala Phe Tyr Pro Pro
20 25 30

Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys Pro Asp
35 40 45

Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr Arg His
50 55 60

Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro Ile Ala
65 70 75 80

Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys Leu Asp
85 90 95

Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys Val Cys
100 105 110

Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala Gly Cys
115 120 125

Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu Asn Thr
130 135 140

Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Ser Ser Pro Gly
145 150 155 160

Gln Ala Val Gly Gly Gly Ala Thr His Gly Cys Ser Gly Gly Ala Arg
165 170 175

Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly Arg Gly
180 185

<210> 129
<211> 162
<212> PRT
<213> Homo sapien

<400> 129

Pro Ala Arg Pro Ala Pro Ala Arg Pro Ser Val Ser Val Ser Pro Arg
1 5 10 15

Pro Gly Ser Arg Glu Glu Arg Arg Ala Leu Gly Pro Leu Pro Pro Cys
20 25 30

Ser Phe Ala Leu Gln Leu Gly Met Ala Gly Tyr Leu Arg Val Val Arg
35 40 45

Ser Leu Cys Arg Ala Ser Gly Ser Arg Pro Ala Trp Ala Pro Ala Ala
50 55 60

Leu Thr Ala Pro Thr Ser Gln Glu Gln Pro Arg Arg His Tyr Ala Asp
65 70 75 80

Lys Arg Ile Lys Val Ala Lys Pro Val Val Glu Met Asp Gly Asp Glu

170

85 90 95

Met Thr Arg Ile Ile Trp Gln Phe Ile Lys Glu Lys Cys Glu Ala Glu
100 105 110

Arg Ala Leu Pro Glu His His Gly Leu Pro Arg His His Gln Glu Gln
115 120 125

Pro Gly Gln Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His Gly
130 135 140

Cys Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly
145 150 155 160

Arg Gly

<210> 130
<211> 112
<212> PRT
<213> Homo sapien

<400> 130

Met Ala Gly Tyr Leu Arg Val Val Arg Ser Leu Cys Arg Ala Ser Gly
1 5 10 15

Ser Arg Pro Ala Trp Ala Pro Ala Ala Leu Thr Ala Pro Thr Ser Gln
20 25 30

Glu Gln Pro Arg Arg His Tyr Ala Asp Lys Arg Ile Lys Val Ala Lys
35 40 45

Pro Val Val Glu Met Asp Gly Asp Glu Met Thr Arg Ile Ile Trp Gln
50 55 60

Phe Ile Lys Glu Lys Cys Glu Ala Glu Arg Ala Leu Pro Glu His His
65 70 75 80

Gly Leu Pro Arg His His Gln Glu Gln Pro Gly Gln Gln Pro Trp Ala
85 90 95

Gly Ser Arg Gly Arg Arg His Pro Trp Leu Gln Trp Arg Gly Gln Gly
100 105 110

<210> 131
<211> 306
<212> PRT

<213> Homo sapien

<400> 131

Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe
1 5 10 15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys
20 25 30

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser
35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser
50 55 60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr
65 70 75 80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu
85 90 95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
100 105 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp
115 120 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln
130 135 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys
145 150 155 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp
165 170 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser
180 185 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu
195 200 205

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu
210 215 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe

225 230 235 240

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe
245 250 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly
260 265 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln
275 280 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys
290 295 300

Ser Ser
305

<210> 132
<211> 508
<212> PRT
<213> Homo sapien

<400> 132

Met Pro Trp Arg Ala Pro Ser Ala Ser Ser Ala Ser Ala Gly Arg Ile
1 5 10 15

Leu Leu Arg Pro Thr Glu Glu Glu Gly Gly Ala Glu Arg Ser Phe Ser
20 25 30

Gly Pro Arg Gly Ser Ser Gly Arg Ile Pro Arg Phe Val Ser Ile Ser
35 40 45

Ile Thr Asn Gly Pro Val Phe Cys Gly Val Val Gly Ala Val Ala Arg
50 55 60

His Glu Tyr Thr Val Ile Gly Pro Lys Val Ser Leu Ala Ala Arg Met
65 70 75 80

Ile Thr Ala Tyr Pro Gly Leu Val Ser Cys Asp Glu Val Thr Tyr Leu
85 90 95

Arg Ser Met Leu Pro Ala Tyr Asn Phe Lys Lys Leu Pro Glu Lys Met
100 105 110

Met Lys Asn Ile Ser Asn Pro Gly Lys Ile Tyr Glu Tyr Leu Gly His
115 120 125

Arg Arg Cys Ile Met Phe Gly Lys Arg His Leu Ala Arg Lys Arg Asn
130 135 140

Lys Asn His Pro Leu Leu Gly Val Leu Gly Ala Pro Cys Leu Ser Thr
145 150 155 160

Asp Trp Glu Lys Glu Leu Glu Ala Phe Gln Met Ala Gln Gln Gly Cys
165 170 175

Leu His Gln Lys Lys Gly Gln Ala Val Leu Tyr Glu Gly Gly Lys Gly
180 185 190

Tyr Gly Lys Ser Gln Leu Leu Ala Glu Ile Asn Phe Leu Ala Gln Lys
195 200 205

Glu Gly His Ser Tyr Pro Ser Gln Val Leu Trp Lys Pro Thr Leu Phe
210 215 220

Glu Val Leu Cys Gln Asp Leu Leu Ser Lys Asp Val Leu Leu Phe His
225 230 235 240

Val Leu Gln Lys Glu Glu Glu Glu Asn Ser Lys Trp Glu Thr Leu Ser
245 250 255

Ala Asn Ala Met Lys Ser Ile Met Tyr Ser Ile Ser Pro Ala Asn Ser
260 265 270

Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr Val Lys Asp Asp Val Asn
275 280 285

Leu Asp Thr Val Leu Leu Leu Pro Phe Leu Lys Glu Ile Ala Val Ser
290 295 300

Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln Leu Leu Val Lys Cys Ala
305 310 315 320

Ala Ile Ile Gly His Ser Phe His Ile Asp Leu Leu Gln His Leu Leu
325 330 335

Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln Val Leu Arg Ala Leu Val
340 345 350

Asp Ile His Val Leu Cys Trp Ser Asp Lys Ser Gln Glu Leu Pro Ala
355 360 365

Glu Pro Ile Leu Met Pro Ser Ser Ile Asp Ile Ile Asp Gly Thr Lys
370 375 380

Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser Ala Ser Leu Leu Arg Leu
385 390 395 400

Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu Val Leu Glu Phe Gly Val
405 410 415

Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu Trp Pro Lys Glu Gln Gln
420 425 430

Ile Ala Leu His Leu Glu Cys Ala Cys Phe Leu Gln Val Leu Ala Cys
435 440 445

Arg Cys Gly Ser Cys His Gly Gly Asp Phe Val Pro Phe His His Phe
450 455 460

Ala Val Cys Ser Thr Lys Asn Ser Lys Gly Thr Ser Arg Phe Cys Thr
465 470 475 480

Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln Val Ile Thr Glu Lys Leu
485 490 495

Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys Ser Ser
500 505

<210> 133
<211> 306
<212> PRT
<213> Homo sapien

<400> 133

Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe
1 5 10 15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys
20 25 30

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser
35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser
50 55 60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr
65 70 75 80

```
Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu
                85                  90                  95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
            100                 105                 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp
        115                 120                 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln
    130                 135                 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys
145                 150                 155                 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp
                165                 170                 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser
            180                 185                 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu
        195                 200                 205

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu
    210                 215                 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe
225                 230                 235                 240

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe
                245                 250                 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly
            260                 265                 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln
        275                 280                 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys
    290                 295                 300

Ser Ser
305
```

<210> 134
<211> 429
<212> PRT
<213> Homo sapien

<400> 134

Met Ile Thr Ala Tyr Pro Gly Leu Val Ser Cys Asp Glu Val Thr Tyr
1 5 10 15

Leu Arg Ser Met Leu Pro Ala Tyr Asn Phe Lys Lys Leu Pro Glu Lys
20 25 30

Met Met Lys Asn Ile Ser Asn Pro Gly Lys Ile Tyr Glu Tyr Leu Gly
35 40 45

His Arg Arg Cys Ile Met Phe Gly Lys Arg His Leu Ala Arg Lys Arg
50 55 60

Asn Lys Asn His Pro Leu Leu Gly Val Leu Gly Ala Pro Cys Leu Ser
65 70 75 80

Thr Asp Trp Glu Lys Glu Leu Glu Ala Phe Gln Met Ala Gln Gln Gly
85 90 95

Cys Leu His Gln Lys Lys Gly Gln Ala Val Leu Tyr Glu Gly Gly Lys
100 105 110

Gly Tyr Gly Lys Ser Gln Leu Leu Ala Glu Ile Asn Phe Leu Ala Gln
115 120 125

Lys Glu Gly His Ser Tyr Pro Ser Gln Val Leu Trp Lys Pro Thr Leu
130 135 140

Phe Glu Val Leu Cys Gln Asp Leu Leu Ser Lys Asp Val Leu Leu Phe
145 150 155 160

His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser Lys Trp Glu Thr Leu
165 170 175

Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser Ile Ser Pro Ala Asn
180 185 190

Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr Val Lys Asp Asp Val
195 200 205

Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu Lys Glu Ile Ala Val

210 215 220

Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln Leu Leu Val Lys Cys
225 230 235 240

Ala Ala Ile Ile Gly His Ser Phe His Ile Asp Leu Leu Gln His Leu
245 250 255

Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln Val Leu Arg Ala Leu
260 265 270

Val Asp Ile His Val Leu Cys Trp Ser Asp Lys Ser Gln Glu Leu Pro
275 280 285

Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp Ile Ile Asp Gly Thr
290 295 300

Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser Ala Ser Leu Leu Arg
305 310 315 320

Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu Val Leu Glu Phe Gly
325 330 335

Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu Trp Pro Lys Glu Gln
340 345 350

Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe Leu Gln Val Leu Ala
355 360 365

Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe Val Pro Phe His His
370 375 380

Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly Thr Ser Arg Phe Cys
385 390 395 400

Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln Val Ile Thr Glu Lys
405 410 415

Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys Ser Ser
420 425

<210> 135
<211> 306
<212> PRT
<213> Homo sapien

<400> 135

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Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe
1               5                  10                  15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys
            20                  25                  30

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser
        35                  40                  45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser
    50                  55                  60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr
65                  70                  75                  80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu
                85                  90                  95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
            100                 105                 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp
        115                 120                 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln
    130                 135                 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys
145                 150                 155                 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp
                165                 170                 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser
            180                 185                 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu
        195                 200                 205

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu
    210                 215                 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe
225                 230                 235                 240
```

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe
245 250 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly
260 265 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln
275 280 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys
290 295 300

Ser Ser
305

<210> 136
<211> 306
<212> PRT
<213> Homo sapien

<400> 136

Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe
1 5 10 15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys
20 25 30

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser
35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser
50 55 60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr
65 70 75 80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu
85 90 95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
100 105 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp
115 120 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln
130 135 140

```
Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys
145                 150                 155                 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp
                165                 170                 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser
            180                 185                 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu
        195                 200                 205

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu
    210                 215                 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe
225                 230                 235                 240

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe
                245                 250                 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly
            260                 265                 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln
        275                 280                 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys
    290                 295                 300

Ser Ser
305
```

<210> 137
<211> 306
<212> PRT
<213> Homo sapien

<400> 137

```
Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe
1               5                   10                  15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys
            20                  25                  30
```

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser
35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser
50 55 60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr
65 70 75 80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu
85 90 95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
100 105 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp
115 120 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln
130 135 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys
145 150 155 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp
165 170 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser
180 185 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu
195 200 205

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu
210 215 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe
225 230 235 240

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe
245 250 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly
260 265 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln

275 280 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys
290 295 300

Ser Ser
305

<210> 138
<211> 306
<212> PRT
<213> Homo sapien

<400> 138

Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe
1 5 10 15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys
20 25 30

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser
35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser
50 55 60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr
65 70 75 80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu
85 90 95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
100 105 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp
115 120 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln
130 135 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys
145 150 155 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp
165 170 175

```
Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser
            180                 185                 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu
        195                 200                 205

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu
    210                 215                 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe
225                 230                 235                 240

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe
                245                 250                 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly
            260                 265                 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln
        275                 280                 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys
    290                 295                 300

Ser Ser
305
```

<210> 139
<211> 121
<212> PRT
<213> Homo sapien

<400> 139

```
Met Arg Ser Thr Arg Glu Arg Arg Pro Gln Glu Arg Arg Arg Gln Gly
1               5                   10                  15

Ser Val Arg Gln Gly Arg Thr Gly Gly Ser Arg Phe Ala Ile Ile Pro
            20                  25                  30

Gly Ser Arg Leu Cys Phe Val Gly Pro Ser His Cys Ile Leu Ala His
        35                  40                  45

Thr Gly Glu Phe Trp Pro Trp Glu Asn Trp Ser Gln His Ala Ala Lys
    50                  55                  60

Leu Ser His Gly Arg Gln Arg Ile Pro Thr His Cys Arg Ser Lys Pro
```

65 70 75 80

Cys Trp Lys Lys Gln Asn Ser Ser Pro Ser Val Glu Leu Arg Gly Asp
85 90 95

Trp Ser Arg Ala Pro Ala Asp Thr Lys Ile Gln Val Ala Gln Val Ser
100 105 110

His Arg Lys Trp Arg Ser Ile Cys Thr
115 120

<210> 140
<211> 125
<212> PRT
<213> Homo sapien

<400> 140

Glu Phe Gly Gly Val Gly Ser Lys Leu Asn Thr Ala Ala Val His Gly
1 5 10 15

Arg Asn Tyr Ser Ile His Thr Phe Ser Glu Tyr Pro Ile Thr Lys Ala
20 25 30

Lys Lys Asn Thr Lys Gly Phe Val Leu Leu Leu Gly Val Asp Leu Ile
35 40 45

Pro Arg Gln Ser Ser Gly His Arg His Arg Gly Cys Ala Gln Ala Cys
50 55 60

Pro Gln Pro Tyr Ala Ala Val Glu Ser Gly Arg Leu Leu Gln Asp Cys
65 70 75 80

Trp Pro Ser Pro Arg Met Ser Ala Ser Phe Ser Ile Tyr Trp Leu Leu
85 90 95

Leu Leu Tyr Val Met Leu Thr Leu Leu Leu Asn Thr Gly Leu Phe Ala
100 105 110

Phe Phe Pro Leu Met Glu Thr Trp Glu Arg His Tyr Phe
115 120 125

<210> 141
<211> 764
<212> PRT
<213> Homo sapien

<400> 141

Met Gln Ser Ser Leu Tyr Phe Glu Arg Ile Lys Tyr Asp Leu Gln Lys
1 5 10 15

Leu His Gly Gly Leu Ser Lys Thr Leu Asn Tyr Leu Phe Phe Val Glu
20 25 30

Lys Ser Tyr Phe Arg His His Phe Ile Pro Gln Gln Leu Ala Val Lys
35 40 45

Pro Leu Leu Cys Cys Met Pro Val Thr Leu Leu Asp Cys Gly Asp Tyr
50 55 60

Gln Cys Ser Arg Leu Leu Arg Ala Arg Val Gly Trp Gly Ile Lys Thr
65 70 75 80

Gly Lys Gln Ile Ala Thr Ile Leu Tyr Cys Glu Cys Leu Cys Trp Arg
85 90 95

Lys Tyr Arg Glu Leu Leu Glu His Leu Arg Gly Ala Pro Thr Leu Asn
100 105 110

Leu Gly Val Ser Arg Gly Ile Leu Lys Lys Val Lys Ala Lys Pro Gln
115 120 125

Ser Ile Ser Ser Leu Gly Ile Glu Gln Asn Val Arg Gly Glu Glu Met
130 135 140

Pro Lys Ala Arg Arg Glu Glu Tyr Ser Lys Gln Glu Gly Phe Gln Arg
145 150 155 160

Glu Lys Ser Ile Pro Asn Asn Ile Cys Thr Asn Leu Met Gly Arg Glu
165 170 175

Asn Val Gly Trp Gly Trp Met Met Arg Leu Lys Lys Lys Ala Arg Ser
180 185 190

Glu Ile Ile Ser Gly Leu Val His His Val Lys Glu Cys Arg Leu Asp
195 200 205

Ser Val Val Asn Arg Lys Ala Ala Gln Phe Ile Met Asn Ile Leu Glu
210 215 220

Asp Ser His Trp Asn Met Glu Asn Lys Val Gly Asp Asp Tyr Ile Leu
225 230 235 240

Glu Ala Gly Arg Thr Phe Leu Arg Lys Leu His Tyr Phe Gly Glu Asn

245 250 255

Asp Gly His Lys His Glu Glu Leu Glu Val Ile Met Thr Ser Ser Leu
260 265 270

Ile Phe Gln Lys Gly Phe Gly Arg Tyr Asn Ile Gly Thr Leu Thr Gly
275 280 285

Leu Thr Lys Gly Asp Glu Ile His His Ile Asn Cys Gln Thr Gln Gly
290 295 300

Gln Met Ser Asn Tyr Phe Ala Tyr Asp Val Glu Ile Thr Asn Phe Ser
305 310 315 320

Ser Gly Asn Gln Lys Leu Gln Asn Leu Val Phe Pro Ser Pro Arg Ile
325 330 335

Leu Ser Val Gln Thr Ile Cys Thr Thr Pro Pro Ile Ser Leu Pro Leu
340 345 350

His Val Cys Pro Thr Ser Lys Ser Arg Ser Ile His Thr Gly Lys Thr
355 360 365

Arg Ala Val Gln Val Ser Glu Asn Glu Lys Glu Glu Leu Ser Cys Ala
370 375 380

Glu Pro Ile Gln Asn Lys His Ile Leu Cys Ile Asp Ser Trp Asn Leu
385 390 395 400

Glu Arg Asn Ser Pro Asn Ser Ile Gly Ile Trp Met Val Cys Asn Pro
405 410 415

Trp Leu Gly Ser Ala Phe Lys Lys Pro Tyr Leu Glu Ile Pro Ser Met
420 425 430

Glu Pro Ser Ser Ile Lys Ala His Leu Lys Ala Tyr Ile Lys Asn Lys
435 440 445

Ile Leu Ala Ala Leu Tyr Thr Asn Asn Asp Val Met Ile Lys Leu Ser
450 455 460

Asp Ala Ile Ile Lys Trp Asn Tyr Lys Met Val Tyr Pro Leu Gln Lys
465 470 475 480

Lys Lys Ala Lys Phe Ser Val Glu His Cys Asp Phe Met Ser Leu His
485 490 495

Ser Leu Gly Ala Glu Glu Gly Ala Leu Val Ser Ser Glu Val Glu Glu
500 505 510

Lys Thr Trp Arg Leu Ile Ile Tyr Ala Met Phe Phe His Leu Lys Glu
515 520 525

Ala Phe Phe Leu Asp Tyr Leu Ile Gln Phe Pro Ser Arg Lys Leu Leu
530 535 540

Val Pro Leu Thr Arg Gln Gln Leu Gly Arg Gln Lys Leu Tyr Cys Met
545 550 555 560

Tyr Met Val Ala Val Gly Arg Arg Phe Leu Ser Pro Gly Pro His Trp
565 570 575

Pro Tyr Thr Ser Pro Leu Leu Val Met Pro Gly His Arg Pro Pro Val
580 585 590

Ala Ile Ile Ser Tyr Leu Ser Leu Trp Leu Val Asn Leu Ser Ile Leu
595 600 605

Ser Ala Ser Ala Leu Gln Ser Ala Gly Thr Leu Leu Thr Ser Ile Ser
610 615 620

Cys Trp Leu Ser Thr Phe Leu Ile Gly Pro Ala Leu Phe Ser Ser Gly
625 630 635 640

Pro Ala Val Glu Ser Pro Cys Pro Phe Arg Arg Ala Met Ala Tyr His
645 650 655

Cys Leu Leu Ser Leu His Ser Ala Ala Thr Thr Leu Asn Pro Ser Phe
660 665 670

Ser Lys Asp Val Ala Asp Phe Thr Gly Lys His Lys Arg Leu Asp Leu
675 680 685

Pro Gly Leu Pro Phe Thr Cys Leu Asn Leu Thr Ser Phe Asn Phe Gln
690 695 700

Ser Gln Asn Val Gly Ile Val Ser Ser Leu Pro Tyr Ile Phe Leu Leu
705 710 715 720

Leu Asn His Glu Ser Leu Ser Leu Pro Leu Ala Met Cys Trp Arg Leu
725 730 735

Leu Ser Gly Phe Arg Met Ser Ser His Leu Val Leu Val Ala Phe Asp
740 745 750

Ala Ser Ser Pro Pro Phe Lys Asp Thr Phe Glu Ile
755 760

<210> 142
<211> 267
<212> PRT
<213> Homo sapien

<400> 142

Val Arg Ala Pro Ser Pro Gly Gln Ala Gly Arg Ala Glu Gly Ala Asp
1 5 10 15

Pro Gln Pro Gly Pro Ala His Leu His Asp Gly Ser Glu Leu Leu Arg
20 25 30

Gly Lys Leu Arg Gln Leu Ser Glu Asp Asn Val Arg Pro Arg Gly Ala
35 40 45

Arg Leu Ser Ser Gly Pro Gly Thr Gly Val Ser Val Leu Phe Glu Arg
50 55 60

Asp Gly Glu Leu His Phe Pro Ala Cys His Arg Ala Leu Arg Ala Cys
65 70 75 80

Asp Gly Lys Ser Ser Ser Gln Pro Asn Val Ile Ser Ala Ala Leu Leu
85 90 95

Gly Pro Arg Ser Val Val Val Ser Gly Gly Leu Val Trp Arg Pro Val
100 105 110

Ser Gly Phe Gly Asp Gly Ser Asp Ala Ile Thr Ala Arg Gln Gly Val
115 120 125

Ser Arg Gly Val Lys Ala Ala Met Asn Arg Val Leu Cys Ala Pro Ala
130 135 140

Ala Gly Ala Val Arg Ala Leu Arg Leu Ile Gly Trp Ala Ser Arg Ser
145 150 155 160

Leu His Pro Leu Pro Gly Ser Arg Asp Arg Ala His Pro Ala Ala Glu
165 170 175

Glu Glu Asp Asp Pro Asp Arg Pro Ile Glu Phe Ser Ser Ser Lys Ala

180 185 190

Asn Pro His Arg Trp Ser Val Gly His Thr Met Gly Lys Gly His Gln
195 200 205

Arg Pro Trp Trp Lys Val Leu Pro Leu Ser Cys Phe Leu Val Ala Leu
210 215 220

Ile Ile Trp Cys Tyr Leu Arg Glu Glu Ser Glu Ala Asp Gln Trp Leu
225 230 235 240

Arg Gln Val Trp Gly Glu Val Pro Glu Pro Ser Asp Arg Ser Glu Glu
245 250 255

Pro Glu Thr Pro Ala Ala Tyr Arg Ala Arg Thr
260 265

<210> 143
<211> 164
<212> PRT
<213> Homo sapien

<400> 143

Ala Glu Ala Trp Tyr Gly Ala Arg Phe Pro Val Ser Gly Asp Gly Ser
1 5 10 15

Asp Ala Ile Thr Ala Arg Gln Gly Val Ser Arg Gly Val Lys Ala Ala
20 25 30

Met Asn Arg Val Leu Cys Ala Pro Ala Ala Gly Ala Val Arg Ala Leu
35 40 45

Arg Leu Ile Gly Trp Ala Ser Arg Ser Leu His Pro Leu Pro Gly Ser
50 55 60

Arg Asp Arg Ala His Pro Ala Ala Glu Glu Glu Asp Asp Pro Asp Arg
65 70 75 80

Pro Ile Glu Phe Ser Ser Ser Lys Ala Asn Pro His Arg Trp Ser Val
85 90 95

Gly His Thr Met Gly Lys Gly His Gln Arg Pro Trp Trp Lys Val Leu
100 105 110

Pro Leu Ser Cys Phe Leu Val Ala Leu Ile Ile Trp Cys Tyr Leu Arg
115 120 125

Glu Glu Ser Glu Ala Asp Gln Trp Leu Arg Gln Val Trp Gly Glu Val
130 135 140

Pro Glu Pro Ser Asp Arg Ser Glu Glu Pro Glu Thr Pro Ala Ala Tyr
145 150 155 160

Arg Ala Arg Thr

<210> 144
<211> 99
<212> PRT
<213> Homo sapien

<400> 144

Met Val Arg Ala Gly Ala Val Gly Ala His Leu Pro Ala Ser Gly Leu
1 5 10 15

Asp Ile Phe Gly Asp Leu Lys Lys Met Asn Lys Arg Gln Leu Tyr Tyr
20 25 30

Gln Val Leu Asn Phe Ala Met Ile Val Ser Ser Ala Leu Met Ile Trp
35 40 45

Lys Gly Leu Ile Val Leu Thr Gly Ser Glu Ser Pro Ile Val Val Val
50 55 60

Leu Ser Gly Ser Met Glu Pro Ala Phe His Arg Gly Asp Leu Leu Phe
65 70 75 80

Leu Thr Asn Phe Arg Glu Asp Pro Ile Arg Ala Glu Ile Met Glu Thr
85 90 95

Ser Asn Phe

<210> 145
<211> 136
<212> PRT
<213> Homo sapien

<400> 145

Val Ile Cys Glu Arg Glu Leu Gly Val Leu Leu Ala Pro Asp Gln Ser
1 5 10 15

Arg Glu Ile Gln Leu Leu Leu Ser Ser Pro Phe Pro Glu Leu Pro Pro
20 25 30

Glu Val Cys Gly Val Thr Arg Cys Ser Met Phe Pro Pro Lys Gly Arg
35 40 45

Thr Arg Leu Arg Ser Pro Val Ala Ala Leu Pro Arg Ser Pro Gly Ser
50 55 60

Ser Leu Ala Glu Val Pro Thr Pro Gln His Ser Gly Ser Gly Ser Phe
65 70 75 80

Leu Pro Ser Gly Ser Phe Leu Ala Gly Gln Cys Pro Arg Leu Ala Arg
85 90 95

Leu Arg Phe Pro Asp Ala Gln Ala Ser Arg Arg Ser Arg Gly Arg Lys
100 105 110

Asp Ala Gly Pro Val Gly Gly Gly Arg Gln Val Leu Arg Ser Arg Leu
115 120 125

Cys His Pro Glu Pro Ala Gly Arg
130 135

<210> 146
<211> 139
<212> PRT
<213> Homo sapien

<400> 146

Met Ser Lys Thr Phe Arg Gln Thr Glu Gly Ser Gln Gly Asp Arg Arg
1 5 10 15

Val His Ser Lys Ala Thr Ala Ser Pro Asp Pro Ala Leu Pro Ser Leu
20 25 30

Leu Trp Thr Gln Glu Lys Ser Asn Pro His Ser Glu Phe Ser His Gln
35 40 45

Asn Leu Ile Ile Asn Thr Leu Ser Leu Phe Phe Ala Gly Thr Glu Thr
50 55 60

Thr Ser Thr Thr Leu Arg Tyr Gly Phe Leu Leu Met Leu Lys Tyr Pro
65 70 75 80

His Val Ala Glu Arg Val Tyr Lys Glu Ile Glu Gln Val Val Gly Pro
85 90 95

His Arg Pro Pro Ala Leu Asp Asp Arg Ala Lys Met Pro Tyr Thr Glu
100 105 110

Ala Val Ile Arg Glu Ile Gln Arg Phe Ala Asp Leu Leu Pro Met Gly
115 120 125

Val Pro His Ile Val Thr Gln His Thr Ser Phe
130 135

<210> 147
<211> 165
<212> PRT
<213> Homo sapien

<400> 147

Arg His Arg Ser Asp Thr Pro Gly Val Trp Cys Gly Gln Asn Thr Pro
1 5 10 15

Asn Ile Pro Asp Leu Leu Pro Ala Pro Leu Lys Gly Leu Arg Glu Gly
20 25 30

Gly Gln Arg Ile Pro Gly Ser Phe Ser Val Pro Thr Ser Val Asp Asn
35 40 45

Gly Ser Asp Ser Leu Gln Leu Pro Ala Ser Glu Arg Pro Ala Ala Ser
50 55 60

Gln Leu Pro Ser Leu Pro Trp His Gln Leu Ser Glu Val Ala Val Gln
65 70 75 80

Met Ser Gly Gly Val Arg Leu Leu Lys Ile Ile Ile Tyr Lys Ile Ile
85 90 95

Tyr Ile Tyr Phe Glu Thr Glu Ser His Ser Val Ala Gln Ala Gly Val
100 105 110

Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys
115 120 125

Lys Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Val
130 135 140

Leu Pro Cys Leu Ala Asn Phe Cys Ile Phe Ser Arg Asp Gly Val Ser
145 150 155 160

Pro Cys Trp Pro Gly
165

<210> 148
<211> 136
<212> PRT
<213> Homo sapien

<400> 148

Met Leu Leu Glu Arg Arg Ser Val Met Asp Pro Pro Gly Gln Val Gln
1 5 10 15

Thr Tyr Glu Glu Gly Leu Phe Tyr Ala Gln Lys Ser Lys Lys Pro Leu
20 25 30

Met Val Ile His His Leu Glu Asp Cys Gln Tyr Ser Gln Ala Leu Lys
35 40 45

Lys Val Phe Ala Gln Asn Glu Glu Ile Gln Glu Met Ala Gln Asn Lys
50 55 60

Phe Ile Met Leu Asn Leu Met His Glu Thr Thr Asp Lys Asn Leu Ser
65 70 75 80

Pro Asp Gly Gln Tyr Val Pro Arg Ile Met Phe Val Asp Pro Ser Leu
85 90 95

Thr Val Arg Ala Asp Ile Ala Gly Arg Tyr Ser Asn Arg Leu Tyr Thr
100 105 110

Tyr Glu Pro Arg Asp Leu Pro Leu Leu Ile Glu Asn Met Lys Lys Ala
115 120 125

Leu Arg Leu Ile Gln Ser Glu Leu
130 135

<210> 149
<211> 196
<212> PRT
<213> Homo sapien

<400> 149

Met Glu Gly Asn Gly Pro Ala Ala Val His Tyr Gln Pro Ala Ser Pro
1 5 10 15

Pro Arg Asp Ala Cys Val Tyr Ser Ser Cys Tyr Cys Glu Glu Asn Ile
20 25 30

Trp Lys Leu Cys Glu Tyr Ile Lys Asn His Asp Gln Tyr Pro Leu Glu

35 40 45

Glu Cys Tyr Ala Val Phe Ile Ser Asn Glu Arg Lys Met Ile Pro Ile
50 55 60

Trp Lys Gln Gln Ala Arg Pro Gly Asp Gly Pro Val Ile Trp Asp Tyr
65 70 75 80

His Val Val Leu Leu His Val Ser Ser Gly Gly Gln Asn Phe Ile Tyr
85 90 95

Asp Leu Asp Thr Val Leu Pro Phe Pro Cys Leu Phe Asp Thr Tyr Val
100 105 110

Glu Asp Ala Phe Lys Ser Asp Asp Asp Ile His Pro Gln Phe Arg Arg
115 120 125

Lys Phe Arg Val Ile Arg Ala Asp Ser Tyr Leu Lys Asn Phe Ala Ser
130 135 140

Asp Arg Ser His Met Lys Asp Ser Ser Gly Asn Trp Arg Glu Pro Pro
145 150 155 160

Pro Pro Tyr Pro Cys Ile Glu Thr Gly Gly Ile Asn Pro Val Asp Asn
165 170 175

Phe Leu Thr Phe Lys Lys Ile Lys Gly Pro Ser Pro Tyr Tyr Tyr Cys
180 185 190

Leu Ala Phe Ile
195

<210> 150
<211> 69
<212> PRT
<213> Homo sapien

<400> 150

Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Ser Gly His Lys Asn Cys
1 5 10 15

Phe Val Lys Val Lys Asp Ser Lys Leu Pro Ala Tyr Lys Asp Leu Gly
20 25 30

Lys Asn Leu Pro Phe Pro Thr Tyr Phe Pro Asp Gly Asp Glu Glu Glu
35 40 45

Leu Pro Glu Asp Leu Tyr Asp Glu Asn Val Cys Gln Pro Gly Ala Pro
50 55 60

Ser Ile Thr Phe Ala
65

<210> 151
<211> 69
<212> PRT
<213> Homo sapien

<400> 151

Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Ser Gly His Lys Asn Cys
1 5 10 15

Leu Val Lys Val Lys Asp Ser Lys Leu Pro Ala Tyr Lys Asp Leu Gly
20 25 30

Lys Asn Leu Pro Phe Pro Thr Tyr Phe Pro Asp Gly Asp Glu Glu Glu
35 40 45

Leu Pro Glu Asp Leu Tyr Asp Glu Asn Val Cys Gln Pro Gly Ala Pro
50 55 60

Ser Ile Thr Phe Ala
65

<210> 152
<211> 174
<212> PRT
<213> Homo sapien

<400> 152

Met Glu Ser Arg Thr Leu Leu Gly Gln Leu Trp Val Pro Leu Ala Ser
1 5 10 15

Gly Trp Ala Arg Gly Gln Arg Thr Cys Arg Arg Arg Leu Arg Tyr Gly
20 25 30

Leu Val Lys Val Glu Met Asp Gly Arg Met Asp Ser Leu Gly His Met
35 40 45

Ala Arg Ser Trp Glu Asp Gly His Arg Pro Lys Ser Val Leu Val Tyr
50 55 60

His Cys Thr Ser Gly Asn Leu Asn Pro Cys Asn Arg Gly Lys Met Gly
65 70 75 80

Phe Gln Val Leu Ala Thr Phe Glu Ile Pro Ile Pro Phe Glu Arg Ala
85 90 95

Leu Thr Arg Pro Tyr Ala Asp Phe Thr Thr Ser Asn Phe Arg Thr Gln
100 105 110

Tyr Trp Asn Ala Ile Ser Gln Gln Ala Pro Ala Ile Ile Tyr Asp Phe
115 120 125

Tyr Leu Trp Leu Thr Gly Arg Lys Pro Arg Gln Gly Gln Asp Gly Ser
130 135 140

Lys Ser Asn Gln Pro Pro Leu Gln Pro Ala Thr Ser Cys Trp Gln Asp
145 150 155 160

Leu Phe Leu His Pro Val Lys Ser Gln Gly Gly Thr Arg Ala
165 170

<210> 153
<211> 167
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (44)..(44)
<223> X=any amino acid

<400> 153

Gly Gln Leu Trp Val Pro Leu Ala Ser Gly Trp Ala Arg Gly Gln Arg
1 5 10 15

Thr Cys Arg Arg Arg Leu Arg Tyr Gly Leu Val Lys Val Glu Met Asp
20 25 30

Gly Arg Met Asp Ser Leu Gly His Met Ala Arg Xaa Trp Glu Asp Gly
35 40 45

His Arg Pro Lys Ser Val Leu Val Tyr His Cys Thr Ser Gly Asn Leu
50 55 60

Asn Pro Cys Asn Arg Gly Lys Met Gly Phe Gln Val Leu Ala Thr Phe
65 70 75 80

Glu Ile Pro Ile Pro Phe Glu Arg Ala Leu Thr Arg Pro Tyr Ala Asp
85 90 95

```
Phe Thr Thr Ser Asn Phe Arg Thr Gln Tyr Trp Asn Ala Ile Ser Gln
            100                 105                 110

Gln Ala Pro Ala Ile Ile Tyr Asp Phe Tyr Leu Trp Leu Thr Gly Arg
        115                 120                 125

Lys Pro Arg Gln Gly Gln Asp Gly Ser Lys Ser Asn Gln Pro Pro Leu
    130                 135                 140

Gln Pro Ala Thr Ser Cys Trp Gln Asp Leu Phe Leu His Pro Val Lys
145                 150                 155                 160

Ser Gln Gly Gly Thr Arg Ala
                165
```

<210> 154
<211> 125
<212> PRT
<213> Homo sapien

<400> 154

```
Met Gln Gln Ala Arg Glu Thr Ala Val Gln Gln Tyr Lys Lys Leu Glu
1               5                   10                  15

Glu Glu Ile Gln Thr Leu Arg Val Tyr Tyr Ser Leu His Lys Ser Leu
            20                  25                  30

Ser Gln Glu Glu Asn Leu Lys Asp Gln Phe Asn Tyr Thr Leu Ser Thr
        35                  40                  45

Tyr Glu Glu Ala Leu Lys Asn Arg Glu Asn Ile Val Ser Ile Thr Gln
    50                  55                  60

Gln Gln Asn Glu Glu Leu Ala Thr Gln Leu Gln Gln Ala Leu Thr Glu
65                  70                  75                  80

Arg Ala Asn Met Glu Leu Gln Leu Gln His Ala Arg Glu Ala Ser Gln
                85                  90                  95

Val Ala Asn Glu Lys Val Gln Lys Leu Glu Arg Leu Val Asp Val Leu
            100                 105                 110

Arg Lys Lys Val Gly Thr Gly Thr Met Arg Thr Val Ile
        115                 120                 125
```

<210> 155
<211> 106
<212> PRT
<213> Homo sapien

<400> 155

Met Pro Gln Ser Arg Arg Gln Trp Asp Phe Glu Gly Gly Lys Gly Arg
1 5 10 15

Arg Gln Ala Gly His Ala Leu Arg Gly Ala Arg Thr His Leu Leu His
20 25 30

Pro His Val Phe Arg Ala Leu Ser Leu Trp Glu Ala Phe Phe Arg Thr
35 40 45

Ala Leu Val Asn Trp Lys Arg Asn Pro Ser Pro Trp Trp Pro Cys Ser
50 55 60

Asp Leu Asp Leu Ser Glu Val Thr Leu Pro Leu Arg Ala Leu Gln Ser
65 70 75 80

Leu Leu Ala Gly Gly Gly Thr Ser Pro Ser His Ser His Phe Leu Thr
85 90 95

Leu Ser Leu Cys Ile Thr Gly Ser Leu Leu
100 105

<210> 156
<211> 237
<212> PRT
<213> Homo sapien

<400> 156

Met Pro Gly Pro Ala Pro Gly Arg Gly Gly Ser Gly Val Gly Leu Arg
1 5 10 15

Gly Leu Ser Ser Leu Gln Ala Pro Gln Pro Ser Arg Val Pro Trp Pro
20 25 30

Met Ala Ala Tyr Ser Tyr Arg Pro Gly Pro Gly Ala Gly Pro Gly Pro
35 40 45

Ala Ala Gly Ala Ala Leu Pro Asp Gln Ser Phe Leu Trp Asn Val Phe
50 55 60

Gln Arg Val Asp Lys Asp Arg Ser Gly Val Ile Ser Asp Thr Glu Leu
65 70 75 80

Gln Gln Ala Leu Ser Asn Gly Thr Trp Thr Pro Phe Asn Pro Val Thr
85 90 95

Val Arg Ser Ile Ile Ser Met Phe Asp Arg Glu Asn Lys Ala Gly Val
100 105 110

Asn Phe Ser Glu Phe Thr Gly Val Trp Lys Tyr Ile Thr Asp Trp Gln
115 120 125

Asn Val Phe Arg Thr Tyr Asp Arg Asp Asn Ser Gly Met Ile Asp Lys
130 135 140

Asn Glu Leu Lys Gln Ala Leu Ser Gly Phe Gly Tyr Arg Leu Ser Asp
145 150 155 160

Gln Phe His Asp Ile Leu Ile Arg Lys Phe Asp Arg Gln Gly Arg Gly
165 170 175

Gln Ile Ala Phe Asp Asp Phe Ile Gln Gly Cys Ile Val Leu Gln Thr
180 185 190

Leu Ala Pro Ser Pro Arg Pro Glu Cys Gly Gly Ala Asn Thr Ala His
195 200 205

Cys Ser Leu Asp Pro Gln Ala Gln Ala Ile Leu Thr Pro Arg Thr Pro
210 215 220

Lys Val Leu Gly Ser Gln Ala Arg Val Thr Met Leu Ala
225 230 235

<210> 157
<211> 67
<212> PRT
<213> Homo sapien

<400> 157

Lys Asp Gln Ser Ala Ala Glu Asp Pro Ala Arg Ala Arg Thr Arg Ala
1 5 10 15

Arg Arg Arg Ser Ala Lys Glu His Asn Thr His Arg Ala Cys Lys Ala
20 25 30

Ala Ala Arg Ala Pro His Ala Tyr Pro Ala His Thr Val Gln Glu Asp
35 40 45

Asp Val Ala Val His Thr Pro Trp His Gln Pro Thr Pro Arg Thr Ser

50 55 60

Ala Ser Leu
65

<210> 158
<211> 156
<212> PRT
<213> Homo sapien

<400> 158

Lys Asp Gln Ser Ala Ala Glu Asp Pro Ala Arg Ala Arg Thr Arg Ala
1 5 10 15

Arg Arg Arg Ser Ala Lys Glu His Asn Thr His Arg Ala Cys Lys Ala
20 25 30

Ala Ala Arg Ala Pro His Ala Tyr Pro Ala His Thr Val Gln Arg Gly
35 40 45

Arg Arg Gly Arg Pro His Pro Val Ala Pro Ala Asn Ala Pro His Leu
50 55 60

Gly Leu Ser Leu Ile Ser Leu Cys Val Val Val Thr Leu Phe Val Ile
65 70 75 80

Val Cys Ser Val Ile Val Cys Tyr Phe Tyr Leu Leu Phe Cys Phe Val
85 90 95

Val Val Cys Val Phe Val Phe Leu Phe Phe Phe Val Phe Leu Phe Phe
100 105 110

Phe Phe Phe Asn Phe Cys Ile Leu Ile Asn Val Phe Asn Tyr Asn Cys
115 120 125

Phe Lys Arg Ile Pro Ala Phe Gln Lys Phe Ile Leu Ser Leu Glu Thr
130 135 140

Arg Gln Gly His Thr Gly Phe Thr Ser Tyr Val Ile
145 150 155

<210> 159
<211> 829
<212> PRT
<213> Homo sapien

<400> 159

Met Thr Thr Arg Gln Ala Thr Lys Asp Pro Leu Leu Arg Gly Val Ser
1 5 10 15

Pro Thr Pro Ser Lys Ile Pro Val Arg Ser Gln Lys Arg Thr Pro Phe
20 25 30

Pro Thr Val Thr Ser Cys Ala Val Asp Gln Glu Asn Gln Asp Pro Arg
35 40 45

Arg Trp Val Gln Lys Pro Pro Leu Asn Ile Gln Arg Pro Leu Val Asp
50 55 60

Ser Ala Gly Pro Arg Pro Lys Ala Arg His Gln Ala Glu Thr Ser Gln
65 70 75 80

Arg Leu Val Gly Ile Ser Gln Pro Arg Asn Pro Leu Glu Glu Leu Arg
85 90 95

Pro Ser Pro Arg Gly Gln Asn Val Gly Pro Gly Pro Pro Ala Gln Thr
100 105 110

Glu Ala Pro Gly Thr Ile Glu Phe Val Ala Asp Pro Ala Ala Leu Ala
115 120 125

Thr Ile Leu Ser Gly Glu Gly Val Lys Ser Cys His Leu Gly Arg Gln
130 135 140

Pro Ser Leu Ala Lys Arg Val Leu Val Arg Gly Ser Gln Gly Gly Thr
145 150 155 160

Thr Gln Arg Val Gln Gly Val Arg Ala Ser Ala Tyr Leu Ala Pro Arg
165 170 175

Thr Pro Thr His Arg Leu Asp Pro Ala Arg Ala Ser Cys Phe Ser Arg
180 185 190

Leu Glu Gly Pro Gly Pro Arg Gly Arg Thr Leu Cys Pro Gln Arg Leu
195 200 205

Gln Ala Leu Ile Ser Pro Ser Gly Pro Ser Phe His Pro Ser Thr Arg
210 215 220

Pro Ser Phe Gln Glu Leu Arg Arg Glu Thr Ala Gly Ser Ser Arg Thr
225 230 235 240

Ser Val Ser Gln Ala Ser Gly Leu Leu Leu Glu Thr Pro Val Gln Pro

245 250 255

Ala Phe Ser Leu Pro Lys Gly Glu Arg Glu Val Val Thr His Ser Asp
260 265 270

Glu Gly Gly Val Ala Ser Leu Gly Leu Ala Gln Arg Val Pro Leu Arg
275 280 285

Glu Asn Arg Glu Met Ser His Thr Arg Asp Ser His Asp Ser His Leu
290 295 300

Met Pro Ser Pro Ala Pro Val Ala Gln Pro Leu Pro Gly His Val Val
305 310 315 320

Pro Cys Pro Ser Pro Phe Gly Arg Ala Gln Arg Val Pro Ser Pro Gly
325 330 335

Pro Pro Thr Leu Thr Ser Tyr Ser Val Leu Arg Arg Leu Thr Val Gln
340 345 350

Pro Lys Thr Arg Phe Thr Pro Met Pro Ser Thr Pro Arg Val Gln Gln
355 360 365

Ala Gln Trp Leu Arg Gly Val Ser Pro Gln Ser Cys Ser Glu Asp Pro
370 375 380

Ala Leu Pro Trp Glu Gln Val Ala Val Arg Leu Phe Asp Gln Glu Ser
385 390 395 400

Cys Ile Arg Ser Leu Glu Gly Ser Gly Lys Pro Pro Val Ala Thr Pro
405 410 415

Ser Gly Pro His Ser Asn Arg Thr Pro Ser Leu Gln Glu Val Lys Ile
420 425 430

Gln Val Ser Leu Cys Gly Gln Gln Leu Cys Cys Leu Leu Asn Ser Asp
435 440 445

Trp Ala Glu Glu Glu Gly Lys Glu Met Gly Asp Gln Glu Glu Asp Ser
450 455 460

Val Gly Arg Leu Leu Asn Ala His Leu Asp Val Thr Leu Gly Cys Ser
465 470 475 480

Leu Pro Pro Gln Arg Ile Gly Ile Leu Gln Gln Leu Leu Arg Gln Glu
485 490 495

Val Glu Gly Leu Val Gly Gly Gln Cys Val Pro Leu Asn Gly Gly Ser
500 505 510

Ser Leu Asp Met Val Glu Leu Gln Pro Leu Leu Thr Glu Ile Ser Arg
515 520 525

Thr Leu Asn Ala Thr Glu His Asn Ser Gly Thr Ser His Leu Pro Gly
530 535 540

Leu Leu Lys His Ser Gly Leu Pro Lys Pro Cys Leu Pro Glu Glu Cys
545 550 555 560

Gly Glu Pro Gln Pro Cys Pro Pro Ala Glu Pro Gly Pro Pro Glu Ala
565 570 575

Phe Cys Arg Ser Glu Pro Glu Ile Pro Glu Pro Ser Leu Gln Glu Gln
580 585 590

Leu Glu Val Pro Glu Pro Tyr Pro Pro Ala Glu Pro Arg Pro Leu Glu
595 600 605

Ser Cys Cys Arg Ser Glu Pro Glu Ile Pro Glu Ser Ser Arg Gln Glu
610 615 620

Gln Leu Glu Val Pro Glu Pro Cys Pro Pro Ala Glu Pro Arg Pro Leu
625 630 635 640

Glu Ser Tyr Cys Arg Ile Glu Pro Glu Ile Pro Glu Ser Ser Arg Gln
645 650 655

Glu Gln Leu Glu Val Pro Glu Pro Cys Pro Pro Ala Glu Pro Gly Pro
660 665 670

Leu Gln Pro Ser Thr Gln Gly Gln Ser Gly Pro Pro Gly Pro Cys Pro
675 680 685

Arg Val Glu Leu Gly Ala Ser Glu Pro Cys Thr Leu Glu His Arg Ser
690 695 700

Leu Glu Ser Ser Leu Pro Pro Cys Cys Ser Gln Trp Ala Pro Ala Thr
705 710 715 720

Thr Ser Leu Ile Phe Ser Ser Gln His Pro Leu Cys Ala Ser Pro Pro
725 730 735

Ile Cys Ser Leu Gln Ser Leu Arg Pro Pro Ala Gly Gln Ala Gly Leu
740 745 750

Ser Asn Leu Ala Pro Arg Thr Leu Ala Leu Arg Glu Arg Leu Lys Ser
755 760 765

Cys Leu Thr Ala Ile His Cys Phe His Glu Ala Arg Leu Asp Asp Glu
770 775 780

Cys Ala Phe Tyr Thr Ser Arg Ala Pro Pro Ser Gly Pro Thr Arg Val
785 790 795 800

Cys Thr Asn Pro Val Ala Thr Leu Leu Glu Trp Gln Asp Ala Leu Cys
805 810 815

Phe Ile Pro Val Gly Ser Ala Ala Pro Gln Gly Ser Pro
820 825

<210> 160
<211> 443
<212> PRT
<213> Homo sapien

<400> 160

Ala Ile Met Thr Thr Arg Gln Ala Thr Lys Asp Pro Leu Leu Arg Gly
1 5 10 15

Val Ser Pro Thr Pro Ser Lys Ile Pro Val Arg Ser Gln Lys Arg Thr
20 25 30

Pro Phe Pro Thr Val Thr Ser Cys Ala Val Asp Gln Glu Asn Gln Asp
35 40 45

Pro Arg Arg Trp Val Gln Lys Pro Pro Leu Asn Ile Gln Arg Pro Leu
50 55 60

Val Asp Ser Ala Gly Pro Arg Pro Lys Ala Arg His Gln Ala Glu Thr
65 70 75 80

Ser Gln Arg Leu Val Gly Ile Ser Gln Pro Arg Asn Pro Leu Glu Glu
85 90 95

Leu Arg Pro Ser Pro Arg Gly Gln Asn Val Gly Pro Gly Pro Pro Ala
100 105 110

Gln Thr Glu Ala Pro Gly Thr Ile Glu Phe Val Ala Asp Pro Ala Ala

115 120 125

Leu Ala Thr Ile Leu Ser Gly Glu Gly Val Lys Ser Cys His Leu Gly
130 135 140

Arg Gln Pro Ser Leu Ala Lys Arg Val Leu Val Arg Gly Ser Gln Gly
145 150 155 160

Gly Thr Thr Gln Arg Val Gln Gly Val Arg Ala Ser Ala Tyr Leu Ala
165 170 175

Pro Arg Thr Pro Thr His Arg Leu Asp Pro Ala Arg Ala Ser Cys Phe
180 185 190

Ser Arg Leu Glu Gly Pro Gly Pro Arg Gly Arg Thr Leu Cys Pro Gln
195 200 205

Arg Leu Gln Ala Leu Ile Ser Pro Ser Gly Pro Ser Phe His Pro Ser
210 215 220

Thr Arg Pro Ser Phe Gln Glu Leu Arg Arg Glu Thr Ala Gly Ser Ser
225 230 235 240

Arg Thr Ser Val Ser Gln Ala Ser Gly Leu Leu Leu Glu Thr Pro Val
245 250 255

Gln Pro Ala Phe Ser Leu Pro Lys Gly Glu Arg Glu Val Val Thr His
260 265 270

Ser Asp Glu Gly Gly Val Ala Ser Leu Gly Leu Ala Gln Arg Val Pro
275 280 285

Leu Arg Glu Asn Arg Glu Met Ser His Thr Arg Asp Ser His Asp Ser
290 295 300

His Leu Met Pro Ser Pro Ala Pro Val Ala Gln Pro Leu Pro Gly His
305 310 315 320

Val Val Pro Cys Pro Ser Pro Phe Gly Arg Ala Gln Arg Val Pro Ser
325 330 335

Pro Gly Pro Pro Thr Leu Thr Ser Tyr Ser Val Leu Arg Arg Leu Thr
340 345 350

Val Gln Pro Lys Thr Arg Phe Thr Pro Met Pro Ser Thr Pro Arg Val
355 360 365

```
Gln Gln Ala Gln Trp Leu Arg Gly Val Ser Pro Gln Ser Cys Ser Glu
    370                 375                 380

Asp Pro Ala Leu Pro Trp Glu Gln Val Ala Val Arg Leu Phe Asp Gln
385                 390                 395                 400

Glu Ser Cys Ile Arg Ser Leu Glu Gly Ser Gly Lys Pro Pro Val Ala
                405                 410                 415

Thr Pro Ser Gly Pro His Ser Asn Arg Thr Pro Ser Leu Gln Glu Val
            420                 425                 430

Lys Ile Gln Val Ser Leu Cys Gly Gln Gln Leu
        435                 440
```

<210> 161
<211> 138
<212> PRT
<213> Homo sapien

<400> 161

```
Met Leu Pro His Leu Pro Pro Trp Pro Ser Leu Ala Leu Pro Gln Glu
1               5                   10                  15

Glu Gly Arg Gly Cys Thr Ser Ser Pro Val Leu Leu Ile Gly Leu Ala
            20                  25                  30

Val Gly Gly Gly Gly Gly Glu Asp Ser Thr Trp Trp Lys Tyr Arg Thr
        35                  40                  45

Pro Asp Leu Pro Leu Asn Phe Pro Cys Pro Ser Gly Leu Ser Asn Leu
    50                  55                  60

Ala Pro Arg Thr Leu Ala Leu Arg Glu Arg Leu Lys Ser Cys Leu Thr
65                  70                  75                  80

Ala Ile His Cys Phe His Glu Ala Arg Leu Asp Asp Glu Cys Ala Phe
                85                  90                  95

Tyr Thr Ser Arg Ala Pro Pro Ser Gly Pro Thr Arg Val Cys Thr Asn
            100                 105                 110

Pro Val Ala Thr Leu Leu Glu Trp Gln Asp Ala Leu Cys Phe Ile Pro
        115                 120                 125
```

Val Gly Ser Ala Ala Pro Gln Gly Ser Pro
130 135

<210> 162
<211> 60
<212> PRT
<213> Homo sapien

<400> 162

Met Arg Ala Arg Thr Pro Pro Ala Ala Pro Lys Glu Lys Ala Phe Ser
1 5 10 15

Ser Glu Ile Glu Asp Leu Pro Tyr Leu Ser Thr Thr Glu Met Tyr Leu
20 25 30

Cys Arg Trp His Gln Pro Pro Pro Ser Pro Leu Pro Leu Arg Glu Ser
35 40 45

Ser Pro Lys Lys Glu Glu Thr Val Ala Ser Lys Ala
50 55 60

<210> 163
<211> 99
<212> PRT
<213> Homo sapien

<400> 163

Lys Lys Gly Phe Leu Cys Cys Glu Met His Arg Thr Ile Leu Cys His
1 5 10 15

Ala Arg Leu Phe Leu Gln Leu Ile Leu Cys Glu Ile Trp Glu Gly Gly
20 25 30

Leu Trp Val Phe Ser Gly Ala Asn Gly Asn Phe Trp Val Gly Glu Pro
35 40 45

Ala Trp Gly Gly Glu Phe Ser Pro Gly Pro Pro Leu Phe Asn Tyr Ile
50 55 60

Asn Ile Tyr Leu Tyr Ile Tyr Val Pro Val Trp Gly Ala Gly Gly Ile
65 70 75 80

Cys Gln Arg Pro Thr Val Leu Leu Tyr Leu Thr Ile Leu His Lys Gly
85 90 95

Ser Lys Met

<210> 164
<211> 294
<212> PRT
<213> Homo sapien

<400> 164

Met Phe Phe Ser Ala Ala Leu Arg Ala Arg Ala Ala Gly Leu Thr Ala
1 5 10 15

His Trp Gly Arg His Val Arg Asn Leu His Lys Thr Ala Met Gln Asn
20 25 30

Gly Ala Gly Gly Ala Leu Phe Val His Arg Asp Thr Pro Glu Asn Asn
35 40 45

Pro Asp Thr Pro Phe Asp Phe Thr Pro Glu Asn Tyr Lys Arg Ile Glu
50 55 60

Ala Ile Val Lys Asn Tyr Pro Glu Gly His Lys Ala Ala Ala Val Leu
65 70 75 80

Pro Val Leu Asp Leu Ala Gln Arg Gln Asn Gly Trp Leu Pro Ile Ser
85 90 95

Ala Met Asn Lys Val Ala Glu Val Leu Gln Val Pro Pro Met Arg Val
100 105 110

Tyr Glu Val Ala Thr Phe Tyr Thr Met Tyr Asn Arg Lys Pro Val Gly
115 120 125

Lys Tyr His Ile Gln Val Cys Thr Thr Thr Pro Cys Met Leu Arg Asn
130 135 140

Ser Asp Ser Ile Leu Glu Ala Ile Gln Lys Lys Leu Gly Ile Lys Val
145 150 155 160

Gly Glu Thr Thr Pro Asp Lys Leu Phe Thr Leu Ile Glu Val Glu Cys
165 170 175

Leu Gly Ala Cys Val Asn Ala Pro Met Val Gln Ile Asn Asp Asn Tyr
180 185 190

Tyr Glu Asp Leu Thr Ala Lys Asp Ile Glu Glu Ile Ile Asp Glu Leu
195 200 205

Lys Ala Gly Lys Ile Pro Lys Pro Gly Pro Arg Ser Gly Arg Phe Ser

210 215 220

Cys Glu Pro Ala Gly Gly Leu Thr Ser Leu Thr Glu Pro Pro Lys Gly
225 230 235 240

Pro Gly Phe Gly Val Gln Cys Val His Leu His Arg Lys Phe Gln Gly
245 250 255

Ala Ile Ala Val Val Val Asn His Arg Ile Ser Val Gly Met Ala Glu
260 265 270

Gly Glu Thr Gly Leu Gly Cys Arg Glu Leu Val Glu Val Val Gln Pro
275 280 285

Tyr Leu Pro Gly Arg Pro
290

<210> 165
<211> 250
<212> PRT
<213> Homo sapien

<400> 165

Met Phe Phe Ser Ala Ala Leu Arg Ala Arg Ala Ala Gly Leu Thr Ala
1 5 10 15

His Trp Gly Arg His Val Arg Asn Leu His Lys Thr Ala Met Gln Asn
20 25 30

Gly Ala Gly Gly Ala Leu Phe Val His Arg Asp Thr Pro Glu Asn Asn
35 40 45

Pro Asp Thr Pro Phe Asp Phe Thr Pro Glu Asn Tyr Lys Arg Ile Glu
50 55 60

Ala Ile Val Lys Asn Tyr Pro Glu Gly His Lys Ala Ala Ala Val Leu
65 70 75 80

Pro Val Leu Asp Leu Ala Gln Arg Gln Asn Gly Trp Leu Pro Ile Ser
85 90 95

Ala Met Asn Lys Val Ala Glu Val Leu Gln Val Pro Pro Met Arg Val
100 105 110

Tyr Glu Val Ala Thr Phe Tyr Thr Met Tyr Asn Arg Lys Pro Val Gly
115 120 125

Lys Tyr His Ile Gln Val Cys Thr Thr Thr Pro Cys Met Leu Arg Asn
130 135 140

Ser Asp Ser Ile Leu Glu Ala Ile Gln Lys Lys Leu Gly Ile Lys Val
145 150 155 160

Gly Glu Thr Thr Pro Asp Lys Leu Phe Thr Leu Ile Glu Val Glu Cys
165 170 175

Leu Gly Ala Cys Val Asn Ala Pro Met Val Gln Ile Asn Asp Asn Tyr
180 185 190

Tyr Glu Asp Leu Thr Ala Lys Asp Ile Glu Glu Ile Ile Asp Glu Leu
195 200 205

Lys Ala Gly Lys Ile Pro Lys Pro Gly Pro Arg Ser Gly Arg Phe Ser
210 215 220

Cys Glu Pro Ala Gly Gly Leu Thr Ser Leu Thr Glu Arg Pro Pro Val
225 230 235 240

Cys Cys Gln Ser Phe Glu Ala Cys Arg Val
245 250

<210> 166
<211> 232
<212> PRT
<213> Homo sapien

<400> 166

Met Phe Phe Ser Ala Ala Leu Arg Ala Arg Ala Ala Gly Leu Thr Ala
1 5 10 15

His Trp Gly Arg His Val Arg Asn Leu His Lys Thr Ala Met Gln Asn
20 25 30

Gly Ala Gly Gly Ala Leu Phe Val His Arg Asp Thr Pro Glu Asn Asn
35 40 45

Pro Asp Thr Pro Phe Asp Phe Thr Pro Glu Asn Tyr Lys Arg Ile Glu
50 55 60

Ala Ile Val Lys Asn Tyr Pro Glu Gly His Lys Ala Ala Ala Val Leu
65 70 75 80

Pro Val Leu Asp Leu Ala Gln Arg Gln Asn Gly Trp Leu Pro Ile Ser

85 90 95

Ala Met Asn Lys Val Ala Glu Val Leu Gln Val Pro Pro Met Arg Val
100 105 110

Tyr Glu Val Ala Thr Phe Tyr Thr Met Tyr Asn Arg Lys Pro Val Gly
115 120 125

Lys Tyr His Ile Gln Val Cys Thr Thr Thr Pro Cys Met Leu Arg Asn
130 135 140

Ser Asp Ser Ile Leu Glu Ala Ile Gln Lys Lys Leu Gly Arg Glu Tyr
145 150 155 160

Met Ile Phe Val Thr Leu Ile Lys Ser Arg Ile Val Ser Leu Asp Leu
165 170 175

Val His Phe Tyr Leu Lys Phe Pro Thr Ser Ala Ile Leu Leu Asp Leu
180 185 190

Tyr Leu Pro Ser Asn Ile Leu Cys Tyr Cys Val Ser Thr Ser Leu Phe
195 200 205

Leu Pro Ile Trp Tyr Ser Ser Ser Val Leu Ser Val Lys Ala Glu Phe
210 215 220

Leu Ile Phe Ser Phe Leu Ile Ser
225 230

<210> 167
<211> 28
<212> PRT
<213> Homo sapien

<400> 167

Met Asp Ser Arg Pro Arg Tyr Ile Pro Phe Lys Gln Tyr Ala Gly Lys
1 5 10 15

Tyr Val Leu Leu Ser Thr Trp Pro Ala Thr Glu Ala
20 25

<210> 168
<211> 106
<212> PRT
<213> Homo sapien

<400> 168

```
Trp Ile Arg Gly Arg Gly Thr Ser Pro Ser Ser Ser Met Leu Ala Asn
1               5                   10                  15

Thr Ser Ser Cys Gln Arg Gly Gln Leu Leu Arg Pro Asp Gly Pro Val
            20                  25                  30

His Gln Val Asp Arg Leu Cys Gly Ala Cys Pro Gly Gln Arg Val Phe
        35                  40                  45

Leu Cys Pro Gly Glu Pro Gly Ala Lys Ser Gly Arg His Leu Ser Gly
    50                  55                  60

Gly Val Pro Pro Tyr Thr Glu Cys Asp His Ala Gln Pro Leu Ala Arg
65                  70                  75                  80

Pro Gly Ala Val Glu Ser Cys Asn His Glu Val Cys Ala Gln Thr Gly
                85                  90                  95

Glu Thr Val Gln Pro Leu Met Ala Arg Arg
            100                 105
```

<210> 169
<211> 137
<212> PRT
<213> Homo sapien

<400> 169

```
Met Lys Val Leu Gly Arg Ser Phe Phe Trp Val Leu Phe Pro Val Leu
1               5                   10                  15

Pro Trp Ala Val Gln Ala Val Glu His Glu Glu Val Ala Gln Arg Val
            20                  25                  30

Ile Lys Leu His Arg Gly Arg Gly Val Ala Ala Met Gln Ser Arg Gln
        35                  40                  45

Trp Val Arg Asp Ser Cys Arg Lys Leu Ser Gly Leu Leu Arg Gln Lys
    50                  55                  60

Asn Ala Val Leu Asn Lys Leu Lys Thr Ala Ile Gly Ala Val Glu Lys
65                  70                  75                  80

Asp Val Gly Leu Ser Asp Glu Glu Lys Leu Phe Gln Val His Thr Phe
                85                  90                  95

Glu Ile Phe Gln Lys Glu Leu Asn Glu Ser Glu Asn Ser Val Phe Gln
            100                 105                 110
```

Ala Val Tyr Gly Leu Gln Arg Ala Leu Gln Gly Asp Tyr Asn Asp Gly
115 120 125

Pro Trp Lys Gly Ser Val Cys Gly Glu
130 135

<210> 170
<211> 241
<212> PRT
<213> Homo sapien

<400> 170

Met Lys Val Leu Gly Arg Ser Phe Phe Trp Val Leu Phe Pro Val Leu
1 5 10 15

Pro Trp Ala Val Gln Ala Val Glu His Glu Glu Val Ala Gln Arg Val
20 25 30

Ile Lys Leu His Arg Gly Arg Gly Val Ala Ala Met Gln Ser Arg Gln
35 40 45

Trp Val Arg Asp Ser Cys Arg Lys Leu Ser Gly Leu Leu Arg Gln Lys
50 55 60

Asn Ala Val Leu Asn Lys Leu Lys Thr Ala Ile Gly Ala Val Glu Lys
65 70 75 80

Asp Val Gly Leu Ser Asp Glu Glu Lys Leu Phe Gln Val His Thr Phe
85 90 95

Glu Ile Phe Gln Lys Glu Leu Asn Glu Ser Glu Asn Ser Val Phe Gln
100 105 110

Ala Val Tyr Gly Leu Gln Arg Ala Leu Gln Gly Asp Tyr Lys Asp Val
115 120 125

Val Asn Met Lys Glu Ser Ser Arg Gln Arg Leu Glu Ala Leu Arg Glu
130 135 140

Ala Ala Ile Lys Glu Glu Thr Glu Tyr Met Glu Leu Leu Ala Ala Glu
145 150 155 160

Lys His Gln Val Glu Ala Leu Lys Asn Met Gln His Gln Asn Gln Ser
165 170 175

```
Leu Ser Met Leu Asp Glu Ile Leu Glu Asp Val Arg Lys Ala Ala Asp
            180                 185                 190

Arg Leu Glu Glu Glu Ile Glu Glu His Ala Phe Asp Asp Asn Lys Ser
        195                 200                 205

Val Ser Val Pro Glu Gln Leu Leu Leu His Leu Leu Ser His Ser Leu
    210                 215                 220

Ile Arg Arg His Val Val Glu Ile Val His Val Tyr Val Phe Asn Val
225                 230                 235                 240

Asp
```

<210> 171
<211> 102
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> X=any amino acid

<400> 171

```
Trp Val Ile Gly Phe Ser Pro Leu Arg Pro Thr His Cys Thr Xaa Thr
1               5                   10                  15

Leu Arg Asp Pro Arg Gly Ala Gly Ala Asp Val Arg Ser Ala Pro Ser
            20                  25                  30

Arg Gly Gly Arg Ala Gly Gln Trp Gly Pro His Arg Gly Gly Val Leu
        35                  40                  45

Val Ser Gly Pro Gly Trp Arg Thr Arg Thr Leu Val Pro Arg Ala Gly
    50                  55                  60

Arg Arg Trp Val His Gly Arg Pro His Pro Arg Ile Pro Ser Pro Ala
65                  70                  75                  80

Pro Ser Leu Asp Ser Pro Val Asn Pro Ala Ala Ser Arg Arg Pro Thr
                85                  90                  95

Trp Ser Trp Pro Val Leu
            100
```

<210> 172
<211> 207
<212> PRT
<213> Homo sapien

<400> 172

Met Lys Ser Ser Gly His Arg Glu Trp Gly Val Gly Lys Pro Gly Thr
1 5 10 15

Pro Gly Asp Arg Ala Arg Glu Gly Gly Ser Gly Pro Asp Pro Ala Pro
20 25 30

Ala Arg Gly Ala Ser Ser Gly Ala Ala Leu Arg Gly Gln Asn Val Ala
35 40 45

Val Ala Glu Thr Arg Arg Gly Arg Pro Asn Ala Thr Leu Gly Pro Ser
50 55 60

Pro Leu Gln Arg Pro Arg Pro Val Thr Cys Pro Arg Phe Ala Ser His
65 70 75 80

Pro Glu Ala Gly Ala Arg Ala Glu Pro Ala Ala Met Ser Gly Glu Pro
85 90 95

Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu Val Glu Pro Gly Ser
100 105 110

Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro Cys Gly Phe Glu Ala
115 120 125

Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu Gln Tyr Pro Gly Ile
130 135 140

Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala Phe Glu Ile Glu Ile
145 150 155 160

Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn Gly Gly Phe Pro Tyr
165 170 175

Glu Lys Asp Val Ser Ile Tyr Ser Val Gly Arg Thr Ser Trp Ser Pro
180 185 190

Tyr Pro Asn Ser Ala Ser Ser Cys His Ser Thr Pro Leu Ala His
195 200 205

<210> 173
<211> 208

<212> PRT
<213> Homo sapien

<400> 173

Ser His Glu Val Gln Arg Thr Pro Gly Val Gly Ser Gly Glu Ala Arg
1 5 10 15

His Ser Gly Arg Pro Gly Gln Gly Arg Arg Val Trp Thr Gly Pro Ser
20 25 30

Pro Cys Pro Gly Ser Glu Leu Arg Ser Cys Pro Thr Arg Ser Lys Arg
35 40 45

Ser Ser Gly Gly Asp Pro Gln Gly Ala Pro Glu Arg His Pro Arg Pro
50 55 60

Leu Pro Ala Pro Glu Ala Pro Pro Arg His Val Pro Ala Val Arg Val
65 70 75 80

Thr Pro Gly Ser Arg Gly Pro Ser Gly Pro Ala Ala Met Ser Gly Glu
85 90 95

Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu Val Glu Pro Gly
100 105 110

Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro Cys Gly Phe Glu
115 120 125

Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu Gln Tyr Pro Gly
130 135 140

Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala Phe Glu Ile Glu
145 150 155 160

Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn Gly Gly Phe Pro
165 170 175

Tyr Glu Lys Asp Val Ser Ile Tyr Ser Val Gly Arg Thr Ser Trp Ser
180 185 190

Pro Tyr Pro Asn Ser Ala Ser Ser Cys His Ser Thr Pro Leu Ala His
195 200 205

<210> 174
<211> 267
<212> PRT
<213> Homo sapien

<400> 174

Met Val Ser Asn Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro
1 5 10 15

Leu Ser Ala Asp Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln
20 25 30

Pro Ser Arg His Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser
35 40 45

Arg Pro Cys Cys Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro
50 55 60

Pro Pro Pro Pro Pro Ala Arg Gln Trp Leu Gly Gly Leu Ala Gly Ala
65 70 75 80

Gly Arg Ser Ser Cys Ala Cys Ala Leu Gly Leu Pro Ser Ala Gly Cys
85 90 95

Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu
100 105 110

Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu Asp Glu Asp Glu Glu Glu
115 120 125

Ala Leu Pro His Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala
130 135 140

Met Val Val Gln Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr
145 150 155 160

Leu Glu Glu Val Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met
165 170 175

Thr Val Arg Val Cys Lys Met Asp Gly Glu Val Met Pro Val Val Val
180 185 190

Val Gln Ser Ala Thr Val Leu Asp Leu Lys Lys Ala Ile Gln Arg Tyr
195 200 205

Val Gln Leu Lys Gln Glu Arg Glu Gly Gly Ile Gln His Ile Ser Trp
210 215 220

Ser Tyr Val Trp Arg Thr Tyr His Leu Thr Ser Ala Gly Glu Lys Leu
225 230 235 240

```
Thr Glu Asp Arg Lys Lys Leu Arg Asp Tyr Gly Ile Arg Asn Arg Asp
                245                 250                 255

Glu Val Ser Phe Ile Lys Lys Leu Arg Gln Lys
            260                 265
```

<210> 175
<211> 225
<212> PRT
<213> Homo sapien

<400> 175

```
Thr Gly Arg Phe Cys Ala Pro Gly Leu Leu Gln Ala Val Ser His Leu
1               5                   10                  15

Ser Leu Val Thr Ala Ala Ala Pro Pro Pro Arg Arg Ala Ser Gly Trp
            20                  25                  30

Ala Ala Ser Leu Gly Arg Ala Ala Val Pro Ala Arg Ala Arg Leu Ala
        35                  40                  45

Ser Leu Val Arg Ala Gly Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala
    50                  55                  60

Ala Leu Glu Glu Thr Glu Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu
65                  70                  75                  80

Asp Glu Asp Glu Glu Glu Ala Leu Pro His Ser Glu Ala Met Asp Val
                85                  90                  95

Phe Gln Glu Gly Leu Ala Met Val Val Gln Asp Pro Leu Leu Cys Asp
            100                 105                 110

Leu Pro Ile Gln Val Thr Leu Glu Glu Val Asn Ser Gln Ile Ala Leu
        115                 120                 125

Glu Tyr Gly Gln Ala Met Thr Val Arg Val Cys Lys Met Asp Gly Glu
    130                 135                 140

Val Met Pro Val Val Val Val Gln Ser Ala Thr Val Leu Asp Leu Lys
145                 150                 155                 160

Lys Ala Ile Gln Arg Tyr Val Gln Leu Lys Gln Glu Arg Glu Gly Gly
                165                 170                 175
```

Ile Gln His Ile Ser Trp Ser Tyr Val Trp Arg Thr Tyr His Leu Thr
180 185 190

Ser Ala Gly Glu Lys Leu Thr Glu Asp Arg Lys Lys Leu Arg Asp Tyr
195 200 205

Gly Ile Arg Asn Arg Asp Glu Val Ser Phe Ile Lys Lys Leu Arg Gln
210 215 220

Lys
225

<210> 176
<211> 224
<212> PRT
<213> Homo sapien

<400> 176

Met Val Ser Asn Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro
1 5 10 15

Leu Ser Ala Asp Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln
20 25 30

Pro Ser Arg His Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser
35 40 45

Arg Pro Cys Cys Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro
50 55 60

Pro His Pro Pro Arg Arg Ala Ser Gly Trp Ala Ala Ser Leu Gly Arg
65 70 75 80

Ala Ala Val Pro Ala Arg Ala Arg Leu Ala Ser Leu Val Arg Ala Gly
85 90 95

Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu
100 105 110

Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu Asp Glu Asp Glu Glu Glu
115 120 125

Ala Leu Pro His Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala
130 135 140

Met Val Val Gln Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr
145 150 155 160

Leu Glu Glu Val Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met
165 170 175

Thr Val Arg Val Cys Lys Met Asp Gly Glu Val Met Pro Val Val Val
180 185 190

Val Gln Ser Ala Thr Val Leu Asp Leu Lys Lys Ala Ile Gln Arg Tyr
195 200 205

Val Gln Leu Lys Gln Glu Arg Glu Gly Gly Ile Gln His Ile Ser Trp
210 215 220

<210> 177
<211> 300
<212> PRT
<213> Homo sapien

<400> 177

Met Val Ser Asn Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro
1 5 10 15

Leu Ser Ala Asp Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln
20 25 30

Pro Ser Arg His Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser
35 40 45

Arg Pro Cys Cys Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro
50 55 60

Pro His Pro Pro Arg Arg Ala Ser Gly Trp Ala Ala Ser Leu Gly Arg
65 70 75 80

Ala Ala Val Pro Ala Arg Ala Arg Leu Ala Ser Leu Val Arg Ala Gly
85 90 95

Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu
100 105 110

Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu Asp Glu Asp Glu Glu Glu
115 120 125

Ala Leu Pro His Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala
130 135 140

```
Met Val Val Gln Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr
145                 150                 155                 160

Leu Glu Glu Val Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met
                165                 170                 175

Thr Val Arg Val Cys Lys Met Asp Gly Glu Val Met Arg Lys Cys Tyr
            180                 185                 190

Pro Pro Pro Phe Arg Phe Met Trp Ser Arg Leu Ser Gln Gln Glu Asp
        195                 200                 205

Leu Thr Val Leu Val Ser Leu Leu Arg Asn Ser Gln Ala Met Pro Arg
    210                 215                 220

Gly Thr Gly Ala Thr Thr Asn Leu Pro Cys Ala Gln Arg Cys Trp Phe
225                 230                 235                 240

Leu Ser Cys His Arg Arg Leu Trp Leu Trp Val Leu Thr Met Asp Leu
                245                 250                 255

Leu Pro Ser Val Ser Val Val Ala Ala Val Val Val Val Gln Ser Ala
            260                 265                 270

Thr Val Leu Asp Leu Lys Lys Ala Ile Gln Arg Tyr Val Gln Leu Lys
        275                 280                 285

Gln Glu Arg Glu Gly Gly Ile Gln His Ile Ser Trp
    290                 295                 300
```

<210> 178
<211> 236
<212> PRT
<213> Homo sapien

<400> 178

```
Gly His Val Leu Gln Ala Lys Arg Trp Gln Arg Cys Pro Ser Ser Thr
1               5                   10                  15

Ile Ser Pro Phe Pro Gln Pro Gly Gln Asn Ser Ser Met Val Ser Asn
            20                  25                  30

Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro Leu Ser Ala Asp
        35                  40                  45

Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln Pro Ser Arg His
    50                  55                  60
```

```
Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser Arg Pro Cys Cys
65                  70                  75                  80

Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro Pro His Pro Pro
                85                  90                  95

Arg Arg Ala Ser Gly Trp Ala Ala Ser Leu Gly Arg Ala Ala Val Pro
            100                 105                 110

Ala Arg Ala Arg Leu Ala Ser Leu Val Arg Ala Gly Ser Ala Gly Arg
        115                 120                 125

Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu Ala Ala Gly Gly
    130                 135                 140

Pro Glu Ala Gln Glu Glu Asp Glu Asp Glu Glu Glu Ala Leu Pro His
145                 150                 155                 160

Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala Met Val Val Gln
                165                 170                 175

Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr Leu Glu Glu Val
            180                 185                 190

Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met Thr Val Arg Val
        195                 200                 205

Cys Lys Met Asp Gly Glu Val Met Arg Lys Cys Tyr Pro Pro Pro Phe
    210                 215                 220

Arg Leu Cys Gly Pro Gly Phe His Ser Arg Lys Thr
225                 230                 235
```

<210> 179
<211> 143
<212> PRT
<213> Homo sapien

<400> 179

```
Met Pro Ala Tyr Thr Ala Thr Ala Gly Thr Leu Arg Asp Thr Gln Leu
1               5                   10                  15

His Thr His Ile Ala Val His Asn Pro Thr Tyr Asn Gln Lys Thr Lys
            20                  25                  30
```

His Glu Thr Phe Pro Trp Ala Leu Asn Pro His Val Asn Val His Thr
35 40 45

Gln Thr His Ala Leu Leu Ser His Phe Leu Phe His Thr Pro Ser Ser
50 55 60

Arg Pro Pro Thr Pro Asp Phe Arg His Pro Gln Ser Gln Ser Glu Leu
65 70 75 80

Ala Pro Ala Gln Pro Ser Leu Asp Thr His Ala Pro Pro Thr His Ala
85 90 95

Leu Pro Ser Pro Ala Gly Gly Gly Gly Phe Gly Arg Glu Pro Ala Glu
100 105 110

Pro Ala Ser Asp Ser Arg Cys Gly Ser Asp Ser Ala Leu His Val Leu
115 120 125

Gln Ala Ala Thr Val Ser Glu Ala Arg Arg Gly Arg Glu Leu Glu
130 135 140

<210> 180
<211> 126
<212> PRT
<213> Homo sapien

<400> 180

Ala His Phe Gly Ser Arg Pro Leu Pro Leu Ser Arg Lys Leu Leu Gln
1 5 10 15

Glu Arg His Thr Arg Ser Leu Pro Gln His Cys Lys His Ala Pro Pro
20 25 30

Gln Thr Thr Asn Ala Pro Pro His Thr Arg Leu Leu Ser Leu Thr Lys
35 40 45

Met Pro Ala Tyr Thr Ala Thr Ala Gly Thr Leu Arg Asp Thr Gln Leu
50 55 60

His Thr His Ile Ala Val His Asn Pro Thr Tyr Asn Gln Lys Thr Lys
65 70 75 80

His Glu Thr Phe Pro Trp Ala Leu Asn Pro His Val Asn Val His Thr
85 90 95

Gln Thr His Ala Leu Leu Ser His Phe Leu Phe His Thr Pro Ser Ser
100 105 110

Arg Pro Pro Thr Pro Asp Phe Arg His Pro Gln Ser Gln Ser
115 120 125

<210> 181
<211> 116
<212> PRT
<213> Homo sapien

<400> 181

Ser Ser Ser Ala Cys His Pro Gly Ser Ser Gly Gly Gly Ile Ala Leu
1 5 10 15

Lys Ile Cys Pro Ile Val Lys Gln Glu His Trp Asn Leu His Ser Thr
20 25 30

Ile Arg Pro Cys His Arg Arg Thr Lys Lys Glu Gly Arg Gly Asp His
35 40 45

Ala Pro Ala Ser Arg Glu Ser Pro Phe Phe Ser Ala Ser Tyr Leu Gly
50 55 60

Lys Tyr Lys Gly Val Arg Ala Gly Thr Thr Ser Gln Arg Val His Gly
65 70 75 80

Gly Ser Gly Arg Gly Arg Trp Val Leu His Gly Ala Thr Pro Gly Thr
85 90 95

Phe Leu Leu Ser His Ser Leu Thr Ile Thr Ser Ser Cys Ser Gln Ser
100 105 110

His Ser His Gln
115

<210> 182
<211> 77
<212> PRT
<213> Homo sapien

<400> 182

Lys Pro His Ser Leu Arg Lys Pro Ser Ser Lys Ala Asn Ile Leu Val
1 5 10 15

Ile Cys Glu Lys Ile Glu His Ser Val Ser Leu Leu Leu Ser Ala Ser
20 25 30

Gln His Leu Leu Glu Gln His Glu Leu Leu Thr Leu Thr His Lys Ser

35 40 45

Pro Thr Leu Ile Ser Pro Thr Gly Glu Phe Gly Gly Leu Tyr Cys His
50 55 60

Val Pro Gly Ile Ile Ile Cys Ser Ser Leu Tyr Glu Glu
65 70 75

<210> 183
<211> 115
<212> PRT
<213> Homo sapien

<400> 183

Leu Val Phe His Phe Leu Ser Glu Thr Leu Asp Asn Ile Phe Ile Phe
1 5 10 15

Tyr Leu Val Ser Ile Phe Gln Phe Ser Ser Lys Phe Val His Phe Ala
20 25 30

Leu Ser Phe Leu Phe Pro Ser Leu Ser Phe Phe Phe Cys Phe Leu Leu
35 40 45

Phe Arg Phe Lys Phe Ile Phe Phe Leu Leu Lys Val Cys Phe Tyr Leu
50 55 60

Leu Ile Ser Leu Ser Ser Leu Phe Phe Ser Ser Pro Ser Arg Thr Ser
65 70 75 80

Val Phe Gln Phe Ser Thr Ser Asn Phe Tyr Leu Leu Gln Ile Val Ser
85 90 95

Ser Tyr His Ser Gln Leu Ile Phe Pro Phe Ser Ser Ala Phe Ser Lys
100 105 110

Cys Val Asn
115

<210> 184
<211> 84
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (77)..(78)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (82)..(82)
<223> X=any amino acid

<400> 184

Lys Pro His Ser Leu Arg Lys Pro Ser Ser Lys Ala Asn Ile Leu Val
1 5 10 15

Ile Cys Glu Lys Ile Glu His Ser Val Ser Leu Leu Leu Ser Ala Ser
20 25 30

Gln His Leu Leu Glu Gln His Glu Leu Leu Thr Leu Thr His Lys Ser
35 40 45

Pro Thr Leu Ile Ser Pro Thr Gly Glu Phe Gly Gly Leu Tyr Cys His
50 55 60

Val Pro Gly Ile Ile Ile Cys Ser Ser Leu Tyr Glu Xaa Xaa Asn Leu
65 70 75 80

Ser Xaa Leu Pro

<210> 185
<211> 84
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (77)..(78)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (82)..(82)
<223> X=any amino acid

<400> 185

Lys Pro His Ser Leu Arg Lys Pro Ser Ser Lys Ala Asn Ile Leu Val
1 5 10 15

Ile Cys Glu Lys Ile Glu His Ser Val Ser Leu Leu Leu Ser Ala Ser
20 25 30

Gln His Leu Leu Glu Gln His Glu Leu Leu Thr Leu Thr His Lys Ser
35 40 45

Pro Thr Leu Ile Ser Pro Thr Gly Glu Phe Gly Gly Leu Tyr Cys His
50 55 60

Val Pro Gly Ile Ile Ile Cys Ser Ser Leu Tyr Glu Xaa Xaa Asn Leu
65 70 75 80

Ser Xaa Leu Pro

<210> 186
<211> 104
<212> PRT
<213> Homo sapien

<400> 186

Met Val Leu Cys Lys Ile Lys Gln His Val Glu Gly Ile Val Ser Ala
1 5 10 15

Trp Trp Leu Leu Glu Pro Pro Glu Arg Cys Cys Gly Ser Ser Thr Ser
20 25 30

Ala Thr Asn Ser Thr Ser Val Ser Ser Arg Lys Ala Glu Asn Lys Tyr
35 40 45

Ala Gly Gly Asn Pro Val Cys Val Arg Pro Thr Pro Lys Trp Gln Lys
50 55 60

Gly Ile Gly Glu Phe Phe Arg Leu Ser Pro Lys Asp Ser Glu Lys Glu
65 70 75 80

Asn Gln Ile Pro Glu Glu Ala Gly Ser Ser Gly Leu Gly Lys Ala Lys
85 90 95

Arg Lys Ala Cys Pro Cys Ala Thr
100

<210> 187
<211> 107
<212> PRT
<213> Homo sapien

<400> 187

Asn Lys Thr Ala Arg Gly Arg Tyr Cys Lys Arg Leu Val Ala Ala Arg
1 5 10 15

Ala Pro Arg Lys Val Leu Gly Ser Ser Thr Ser Ala Thr Asn Ser Thr

20 25 30

Ser Val Ser Ser Arg Lys Ala Glu Asn Lys Tyr Ala Gly Gly Asn Pro
35 40 45

Val Cys Val Arg Pro Thr Pro Lys Trp Gln Lys Gly Ile Gly Glu Phe
50 55 60

Phe Arg Leu Ser Pro Lys Asp Ser Glu Lys Glu Asn Gln Ile Pro Glu
65 70 75 80

Glu Ala Gly Ser Ser Gly Leu Gly Lys Ala Lys Arg Lys Ala Cys Pro
85 90 95

Leu Gln Pro Asp His Thr Asn Asp Glu Lys Glu
100 105

<210> 188
<211> 38
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> X=any amino acid

<400> 188

Pro Pro Pro Arg Leu Leu Ile Tyr Lys Gly Gln Xaa Val Ile Leu Asp
1 5 10 15

Ala Ala Arg Ala Ala Gln Cys Asp Gly Leu Val Ala Ala Glu Val Pro
20 25 30

Asp Tyr Asn Ala Arg Ile
35

<210> 189
<211> 47
<212> PRT
<213> Homo sapien

<400> 189

Ile Phe Val Leu Ile Asn Leu Val Asn Lys Asn Lys Ser Lys Ser Glu
1 5 10 15

Lys Lys Thr Thr Gln Lys Lys Lys Val Gly Gly Asn Gln Gly Pro Lys
20 25 30

Gly Ser Leu Cys Asp Leu Val Phe Arg Pro Ile Pro Gln Val Gly
35 40 45

<210> 190
<211> 71
<212> PRT
<213> Homo sapien

<400> 190

Met Leu Leu Glu Arg Arg Ser Val Asp Gly Ser Trp Ser Arg Pro Arg
1 5 10 15

Tyr Ile Asp Phe Thr Ala Asp Gln Val Asp Leu Thr Ser Ala Leu Thr
20 25 30

Lys Lys Ile Thr Leu Lys Thr Pro Leu Val Ser Ser Pro Met Asp Thr
35 40 45

Val Thr Glu Ala Gly Met Ala Ile Ala Met Ala Leu Thr Gly Gly Ile
50 55 60

Gly Phe Ile His His Asn Ser
65 70

<210> 191
<211> 138
<212> PRT
<213> Homo sapien

<400> 191

Met Pro Ile Thr Ser Thr Ser Pro Val Glu Pro Val Val Thr Thr Glu
1 5 10 15

Gly Ser Ser Gly Ala Ala Gly Leu Glu Pro Arg Lys Leu Ser Ser Lys
20 25 30

Thr Arg Arg Asp Lys Glu Lys Gln Ser Cys Lys Ser Cys Gly Glu Thr
35 40 45

Phe Asn Ser Ile Thr Lys Arg Arg His His Cys Lys Leu Cys Gly Ala
50 55 60

Val Ile Cys Gly Lys Cys Ser Glu Phe Lys Ala Glu Asn Ser Arg Gln
65 70 75 80

Ser Arg Val Cys Arg Asp Cys Phe Leu Thr Gln Pro Val Ala Pro Glu

85 90 95

Ser Thr Glu Val Gly Ala Pro Ser Ser Cys Ser Pro Pro Gly Gly Ala
100 105 110

Ala Glu Pro Pro Asp Thr Cys Ser Cys Ala Pro Ala Ala Leu Ala Ala
115 120 125

Ser Ala Phe Gly Val Ser Leu Gly Pro Gly
130 135

<210> 192
<211> 67
<212> PRT
<213> Homo sapien

<400> 192

Ser Arg Gly Ser Arg Leu Pro Ser Asn Phe Pro Ser Asp Leu Tyr Ser
1 5 10 15

Leu Ala His Ser Tyr Leu Gly Gly Gly Gly Arg Lys Gly Arg Thr Lys
20 25 30

Arg Glu Ala Ala Ala Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu
35 40 45

Arg Lys Leu Val Thr Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly
50 55 60

Ala Arg Arg
65

<210> 193
<211> 65
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X=any amino acid

<400> 193

Leu Glu Asp Leu Gly Cys Leu Ala Leu Xaa Ser Asp Xaa Ile Ala Gly
1 5 10 15

His Ser Tyr Leu Gly Gly Gly Gly Arg Lys Gly Arg Thr Lys Arg Glu
20 25 30

Ala Ala Ala Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu Arg Lys
35 40 45

Leu Val Thr Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly Ala Arg
50 55 60

Arg
65

<210> 194
<211> 195
<212> PRT
<213> Homo sapien

<400> 194

Met Gly Ser His Tyr Val Ser Gln Ala Asp Pro Lys Phe Leu Gly Ser
1 5 10 15

Ser Asn Ser Pro Ala Leu Ala Ser Gln Ser Ala Glu Ile Thr Gly Val
20 25 30

Ser His Pro Ala Gln Pro Thr His Pro Phe Leu Ala Asn Leu Phe Leu
35 40 45

Gly Pro Ser Arg His Pro Cys Leu Ile Pro Tyr Pro Arg Ser Ala Met
50 55 60

Leu Leu Ser Leu Gly Pro His Thr His Leu Gly Ser His Ile Pro Gln
65 70 75 80

Arg Gly Ser Ser Arg Leu Leu Pro Ala Leu Pro Ile Pro Thr Thr Leu
85 90 95

Asn Pro Cys Leu Ser Ser Asp Arg Ala Ser His His Ala Tyr Ala His
100 105 110

Phe Thr Ser Asp Ser Cys Leu Gly Tyr Arg Arg Trp Arg Pro Glu Arg
115 120 125

Ser His Gln Glu Arg Ser Cys Cys Gln His Gln Pro Pro Gln Pro Trp
130 135 140

Arg Ala Arg Glu Glu Thr Gly Asp Gln Ala Ala Glu Phe Arg Glu Glu
145 150 155 160

Glu Ala Arg Gly Thr Ala Leu Arg Gln Ser Trp Arg Val Arg Ser Arg
165 170 175

Gly Ala Gln Arg Ala Gln Gly Gly Ala Ser Ala Met Lys Asp Arg Pro
180 185 190

Glu Gly Val
195

<210> 195
<211> 124
<212> PRT
<213> Homo sapien

<400> 195

Trp Met Trp Ser Arg Pro Arg Trp Gly Ala Glu Phe Arg Lys Ile Pro
1 5 10 15

Thr Ser Met Lys Ala Lys Arg Ser His Gln Ala Ile Ile Met Ser Thr
20 25 30

Ser Leu Arg Val Ser Pro Ser Ile His Gly Tyr His Phe Asp Thr Ala
35 40 45

Ser Arg Lys Lys Ala Val Gly Asn Ile Phe Glu Asn Thr Asp Gln Glu
50 55 60

Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly Asp Lys Lys Ala Glu Glu
65 70 75 80

Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln Asp Val Glu Glu Lys Thr
85 90 95

Arg Ala Leu Met Ala Leu Lys Lys Arg Thr Lys Asp Lys Leu Phe Gln
100 105 110

Phe Leu Lys Leu Arg Lys Tyr Ser Ile Lys Val His
115 120

<210> 196
<211> 106
<212> PRT
<213> Homo sapien

<400> 196

Met Lys Ala Lys Arg Ser His Gln Ala Ile Ile Met Ser Thr Ser Leu
1 5 10 15

Arg Val Ser Pro Ser Ile His Gly Tyr His Phe Asp Thr Ala Ser Arg
20 25 30

Lys Lys Ala Val Gly Asn Ile Phe Glu Asn Thr Asp Gln Glu Ser Leu
35 40 45

Glu Arg Leu Phe Arg Asn Ser Gly Asp Lys Lys Ala Glu Glu Arg Ala
50 55 60

Lys Ile Ile Phe Ala Ile Asp Gln Asp Val Glu Glu Lys Thr Arg Ala
65 70 75 80

Leu Met Ala Leu Lys Lys Arg Thr Lys Asp Lys Leu Phe Gln Phe Leu
85 90 95

Lys Leu Arg Lys Tyr Ser Ile Lys Val His
100 105

<210> 197
<211> 129
<212> PRT
<213> Homo sapien

<400> 197

Met Leu Leu Glu Arg Arg Ser Val Met Asp Gly Gln Val Lys Gly Ala
1 5 10 15

Glu Phe Arg Lys Ile Pro Thr Ser Met Lys Ala Lys Arg Ser His Gln
20 25 30

Ala Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His Gly
35 40 45

Tyr His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile Phe
50 55 60

Glu Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly
65 70 75 80

Asp Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln
85 90 95

Asp Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg Thr
100 105 110

Lys Cys Phe Gln Gln Gly Phe Glu Asn Ser Ser Val Pro Ala Gly Lys
115 120 125

Asp

<210> 198
<211> 130
<212> PRT
<213> Homo sapien

<400> 198

Met Leu Leu Glu Arg Arg Ser Val Met Asp Gly Gln Val Ser Leu Gly
1 5 10 15

Ala Glu Phe Arg Lys Ile Pro Thr Ser Met Lys Ala Lys Arg Ser His
20 25 30

Gln Ala Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His
35 40 45

Gly Tyr His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile
50 55 60

Phe Glu Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser
65 70 75 80

Gly Asp Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp
85 90 95

Gln Asp Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg
100 105 110

Thr Lys Cys Phe Gln Gln Gly Phe Glu Asn Ser Ser Val Pro Ala Gly
115 120 125

Lys Asp
130

<210> 199
<211> 85
<212> PRT
<213> Homo sapien

<400> 199

Ile Leu Cys Asp Met Ile Phe Trp Ile Tyr Arg Thr Leu Ala His Val
1 5 10 15

Pro Cys Ala Ser His Ser Ser Glu Val Ile Ile Tyr Thr Glu Gly Phe
20 25 30

Lys Ile Arg Leu Glu Val Glu Ile Tyr Tyr Leu Phe Met His Cys Thr
35 40 45

Val Phe Leu Tyr Cys Cys Leu Lys Leu Leu Ser Cys Ala Ser Leu Ile
50 55 60

Lys Ala Gln Asn Val Leu Pro Thr Pro Tyr Leu Arg Arg Asn Lys Ile
65 70 75 80

Thr Ser Ile Asp Phe
85

<210> 200
<211> 68
<212> PRT
<213> Homo sapien

<400> 200

Asp Ala Cys Arg Ala Gly Arg Ser Val Asp Gly Tyr Lys Ala Val Arg
1 5 10 15

Phe Ser Ser Pro Ser Arg Ala Leu Leu Gly Thr Arg Glu Ile Trp Leu
20 25 30

Trp Ser Arg Trp Ser Ser Leu Thr Pro His Arg Ala Asn Leu Asn Leu
35 40 45

Val Leu Glu Lys Ala Phe Ser Asn Ser Thr Pro Pro Tyr Lys Met His
50 55 60

Met Glu Val Gly
65

<210> 201
<211> 378
<212> PRT
<213> Homo sapien

<400> 201

Ser Ala Val Gly Ser Asp His Ile Phe His Asn Ile Pro Gly Ser Thr

1 5 10 15

Ser Ser Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser
20 25 30

Ser Glu Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg
35 40 45

Pro Gln Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys
50 55 60

Cys Phe Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys
65 70 75 80

Tyr Lys Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn
85 90 95

Glu Arg Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala
100 105 110

Glu Glu Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu
115 120 125

Leu Thr Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Arg
130 135 140

Ser Leu Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Asp
145 150 155 160

Lys Ser Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg
165 170 175

Leu Ala Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp
180 185 190

Asp Asp Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser
195 200 205

Ser Ala Pro Arg Glu Met Pro Lys Ala Glu Glu Lys Glu Val Pro Glu
210 215 220

Asp Ser Leu Glu Glu Cys Ala Ile Thr Cys Ser Asn Ser His Gly Pro
225 230 235 240

Tyr Asp Ser Asn Gln Pro His Arg Lys Thr Lys Ile Thr Phe Glu Glu
245 250 255

```
Asp Lys Val Asp Ser Thr Leu Ile Gly Ser Ser Ser His Val Glu Trp
            260                 265                 270

Glu Asp Ala Val His Ile Ile Pro Glu Asn Glu Ser Asp Asp Glu Glu
        275                 280                 285

Glu Glu Glu Lys Gly Pro Val Ser Pro Arg Asn Leu Gln Glu Ser Glu
    290                 295                 300

Glu Glu Glu Val Pro Gln Glu Ser Trp Asp Glu Gly Tyr Ser Thr Leu
305                 310                 315                 320

Ser Ile Pro Pro Glu Met Leu Ala Ser Tyr Gln Ser Tyr Ser Gly Thr
                325                 330                 335

Phe His Ser Leu Glu Glu Gln Gln Val Cys Met Ala Val Asp Ile Gly
            340                 345                 350

Gly His Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly
        355                 360                 365

Pro Ser Gln Ala Gln Gln Gly Ala Ala Gly
    370                 375
```

<210> 202
<211> 876
<212> PRT
<213> Homo sapien

<400> 202

```
Met Gly Asn Ser Lys Lys Asn Thr Glu Thr Gly Lys Thr Thr Phe Phe
1               5                   10                  15

Thr Asn Glu Leu Phe Ile His Phe Gln Trp Ile Gln Thr Lys Leu Gln
            20                  25                  30

Lys Thr Gln Arg Lys Ser Gly Gln Ala Lys Ser Leu Ile Ser Tyr Thr
        35                  40                  45

Cys Gly Lys Ala Leu Ser Ser Val Leu Thr Glu Ser Arg Trp Gly Asp
    50                  55                  60

Phe Met Thr Thr Ile Lys Lys Ile Gln Leu Leu Gly Asn Cys Phe Cys
65                  70                  75                  80
```

Leu Asp Asp Val Val Gln Thr Arg Asp Lys Gln Leu Arg Asn Met Leu
85 90 95

Arg Cys Ile Gly Lys Asp Thr Gly Leu Trp His His His Lys Gly Thr
100 105 110

Arg Ile Leu Arg Val Asn Ala Glu Gly Met Ile Pro Ile Gly Gly Asp
115 120 125

Pro Gln Val Arg Leu Gly Cys Leu Cys Phe Arg Lys Ala Trp Ala Ile
130 135 140

Gly Met Gln Gly Ser Tyr Asp Ser Met Thr Pro Pro Pro Ser Asn Ser
145 150 155 160

Val Ile Ala Thr Ala Asp Gly Tyr Leu Ala Arg Trp Pro Gln Ser Thr
165 170 175

Ser Leu Leu Ser Glu Ser Glu Leu Leu Ala Val Leu Ser Ala Leu Ser
180 185 190

Ser Gly Thr Ser Asn Leu Val Phe Val Val Lys Asp Pro Lys Val Leu
195 200 205

Trp Gly Val Ile Thr Phe Phe Tyr Asn Ile Pro Gly Ser Thr Ser Ser
210 215 220

Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser Ser Glu
225 230 235 240

Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg Pro Gln
245 250 255

Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys Cys Phe
260 265 270

Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys Tyr Lys
275 280 285

Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn Glu Arg
290 295 300

Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala Glu Glu
305 310 315 320

Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu Leu Thr

325 330 335

Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Cys Ser Leu
340 345 350

Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Asp Lys Ser
355 360 365

Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg Leu Ala
370 375 380

Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp Asp Asp
385 390 395 400

Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser Ser Ala
405 410 415

Pro Arg Glu Met Pro Lys Ala Glu Glu Lys Glu Val Pro Glu Asp Ser
420 425 430

Leu Glu Glu Cys Ala Ile Thr Cys Ser Asn Ser His Gly Pro Tyr Asp
435 440 445

Ser Asn Gln Pro His Arg Lys Thr Lys Ile Thr Phe Glu Glu Asp Lys
450 455 460

Val Asp Ser Thr Leu Ile Gly Ser Ser Ser His Val Glu Trp Glu Asp
465 470 475 480

Ala Val His Ile Ile Pro Glu Asn Glu Ser Asp Asp Glu Glu Glu Glu
485 490 495

Glu Lys Gly Pro Val Ser Pro Arg Asn Leu Gln Glu Ser Glu Glu Glu
500 505 510

Glu Val Pro Gln Glu Ser Trp Asp Glu Gly Tyr Ser Thr Leu Ser Ile
515 520 525

Pro Pro Glu Met Leu Ala Ser Tyr Gln Ser Tyr Ser Gly Thr Phe His
530 535 540

Ser Leu Glu Glu Gln Gln Val Cys Met Ala Val Asp Ile Gly Gly His
545 550 555 560

Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly Pro Ser
565 570 575

```
Gln Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly Pro Glu Val Leu Gln
            580                 585                 590

Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu Glu Leu
        595                 600                 605

Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe Tyr Ile Leu Glu Gln
    610                 615                 620

Gln Arg Val Gly Trp Ala Leu Asp Met Asp Glu Ile Glu Lys Tyr Gln
625                 630                 635                 640

Glu Val Glu Glu Asp Gln Asp Pro Ser Cys Pro Arg Leu Ser Arg Glu
                645                 650                 655

Leu Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg
            660                 665                 670

Cys Tyr Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu Gly Gln
        675                 680                 685

Pro Tyr Arg Ser Ala Val His Ser Leu Glu Glu Gln Tyr Leu Gly Leu
    690                 695                 700

Ala Leu Asp Val Asp Arg Ile Lys Lys Asp Gln Glu Glu Glu Glu Asp
705                 710                 715                 720

Gln Gly Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Glu Ala Val
                725                 730                 735

Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro
            740                 745                 750

Ser Ser Cys Leu Glu Gln Pro Asp Ser Cys Leu Pro Tyr Gly Ser Ser
        755                 760                 765

Phe Tyr Ala Leu Glu Glu Lys His Val Gly Phe Ser Leu Asp Val Gly
    770                 775                 780

Glu Ile Glu Lys Lys Gly Lys Gly Lys Lys Arg Arg Gly Arg Arg Ser
785                 790                 795                 800

Thr Lys Lys Arg Arg Arg Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln
                805                 810                 815
```

Asn Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly
820 825 830

Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser
835 840 845

Gly Tyr Leu Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe
850 855 860

Tyr Leu Leu Glu Gln Gln Arg Val Glu Leu Arg Pro
865 870 875

<210> 203
<211> 378
<212> PRT
<213> Homo sapien

<400> 203

Ser Ala Val Gly Ser Asp His Ile Phe His Asn Ile Pro Gly Ser Thr
1 5 10 15

Ser Ser Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser
20 25 30

Ser Glu Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg
35 40 45

Pro Gln Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys
50 55 60

Cys Phe Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys
65 70 75 80

Tyr Lys Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn
85 90 95

Glu Arg Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala
100 105 110

Glu Glu Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu
115 120 125

Leu Thr Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Arg
130 135 140

Ser Leu Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Asp

```
145                 150                 155                 160

Lys Ser Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg
                165                 170                 175

Leu Ala Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp
            180                 185                 190

Asp Asp Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser
        195                 200                 205

Ser Ala Pro Arg Glu Met Pro Lys Ala Glu Glu Lys Glu Val Pro Glu
    210                 215                 220

Asp Ser Leu Glu Glu Cys Ala Ile Thr Cys Ser Asn Ser His Gly Pro
225                 230                 235                 240

Tyr Asp Ser Asn Gln Pro His Arg Lys Thr Lys Ile Thr Phe Glu Glu
                245                 250                 255

Asp Lys Val Asp Ser Thr Leu Ile Gly Ser Ser Ser His Val Glu Trp
            260                 265                 270

Glu Asp Ala Val His Ile Ile Pro Glu Asn Glu Ser Asp Asp Glu Glu
        275                 280                 285

Glu Glu Glu Lys Gly Pro Val Ser Pro Arg Asn Leu Gln Glu Ser Glu
    290                 295                 300

Glu Glu Glu Val Pro Gln Glu Ser Trp Asp Glu Gly Tyr Ser Thr Leu
305                 310                 315                 320

Ser Ile Pro Pro Glu Met Leu Ala Ser Tyr Gln Ser Tyr Ser Gly Thr
                325                 330                 335

Phe His Ser Leu Glu Glu Gln Gln Val Cys Met Ala Val Asp Ile Gly
            340                 345                 350

Gly His Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly
        355                 360                 365

Pro Ser Gln Ala Gln Gln Gly Ala Ala Gly
    370                 375
```

<210> 204
<211> 782

<212> PRT
<213> Homo sapien

<400> 204

Met Leu Arg Cys Ile Gly Lys Asp Thr Gly Leu Trp His His His Lys
1 5 10 15

Gly Thr Arg Ile Leu Arg Val Asn Ala Glu Gly Met Ile Pro Ile Gly
20 25 30

Gly Asp Pro Gln Val Arg Leu Gly Cys Leu Cys Phe Arg Lys Ala Trp
35 40 45

Ala Ile Gly Met Gln Gly Ser Tyr Asp Ser Met Thr Pro Pro Pro Ser
50 55 60

Asn Ser Val Ile Ala Thr Ala Asp Gly Tyr Leu Ala Arg Trp Pro Gln
65 70 75 80

Ser Thr Ser Leu Leu Ser Glu Ser Glu Leu Leu Ala Val Leu Ser Ala
85 90 95

Leu Ser Ser Gly Thr Ser Asn Leu Val Phe Val Val Lys Asp Pro Lys
100 105 110

Val Leu Trp Gly Val Ile Thr Phe Phe Tyr Asn Ile Pro Gly Ser Thr
115 120 125

Ser Ser Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser
130 135 140

Ser Glu Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg
145 150 155 160

Pro Gln Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys
165 170 175

Cys Phe Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys
180 185 190

Tyr Lys Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn
195 200 205

Glu Arg Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala
210 215 220

Glu Glu Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu
225 230 235 240

Leu Thr Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Cys
245 250 255

Ser Leu Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Asp
260 265 270

Lys Ser Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg
275 280 285

Leu Ala Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp
290 295 300

Asp Asp Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser
305 310 315 320

Ser Ala Pro Arg Glu Met Pro Lys Ala Glu Glu Lys Glu Val Pro Glu
325 330 335

Asp Ser Leu Glu Glu Cys Ala Ile Thr Cys Ser Asn Ser His Gly Pro
340 345 350

Tyr Asp Ser Asn Gln Pro His Arg Lys Thr Lys Ile Thr Phe Glu Glu
355 360 365

Asp Lys Val Asp Ser Thr Leu Ile Gly Ser Ser Ser His Val Glu Trp
370 375 380

Glu Asp Ala Val His Ile Ile Pro Glu Asn Glu Ser Asp Asp Glu Glu
385 390 395 400

Glu Glu Glu Lys Gly Pro Val Ser Pro Arg Asn Leu Gln Glu Ser Glu
405 410 415

Glu Glu Glu Val Pro Gln Glu Ser Trp Asp Glu Gly Tyr Ser Thr Leu
420 425 430

Ser Ile Pro Pro Glu Met Leu Ala Ser Tyr Gln Ser Tyr Ser Gly Thr
435 440 445

Phe His Ser Leu Glu Glu Gln Gln Val Cys Met Ala Val Asp Ile Gly
450 455 460

Gly His Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly

```
465                 470                 475                 480

Pro Ser Gln Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly Pro Glu Val
                485                 490                 495

Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu
            500                 505                 510

Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe Tyr Ile Leu
        515                 520                 525

Glu Gln Gln Arg Val Gly Trp Ala Leu Asp Met Asp Glu Ile Glu Lys
    530                 535                 540

Tyr Gln Glu Val Glu Glu Asp Gln Asp Pro Ser Cys Pro Arg Leu Ser
545                 550                 555                 560

Arg Glu Leu Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp Ser Leu
                565                 570                 575

Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu
            580                 585                 590

Gly Gln Pro Tyr Arg Ser Ala Val His Ser Leu Glu Glu Gln Tyr Leu
        595                 600                 605

Gly Leu Ala Leu Asp Val Asp Arg Ile Lys Lys Asp Gln Glu Glu Glu
    610                 615                 620

Glu Asp Gln Gly Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Glu
625                 630                 635                 640

Ala Val Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser
                645                 650                 655

Thr Pro Ser Ser Cys Leu Glu Gln Pro Asp Ser Cys Leu Pro Tyr Gly
            660                 665                 670

Ser Ser Phe Tyr Ala Leu Glu Glu Lys His Val Gly Phe Ser Leu Asp
        675                 680                 685

Val Gly Glu Ile Glu Lys Lys Gly Lys Gly Lys Lys Arg Arg Gly Arg
    690                 695                 700

Arg Ser Thr Lys Lys Arg Arg Arg Arg Gly Arg Lys Glu Gly Glu Glu
705                 710                 715                 720
```

```
Asp Gln Asn Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu
                725                 730                 735

Lys Gly Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr
            740                 745                 750

Pro Ser Gly Tyr Leu Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser
        755                 760                 765

Ala Phe Tyr Leu Leu Glu Gln Gln Arg Val Glu Leu Arg Pro
    770                 775                 780
```

<210> 205
<211> 449
<212> PRT
<213> Homo sapien

<400> 205

```
Met Ala Phe Ala Arg Arg Leu Leu Arg Gly Pro Leu Ser Gly Pro Leu
1               5                   10                  15

Leu Gly Arg Arg Gly Val Cys Ala Gly Ala Met Ala Pro Pro Arg Arg
            20                  25                  30

Phe Val Leu Glu Leu Pro Asp Cys Thr Leu Ala His Phe Ala Leu Gly
        35                  40                  45

Ala Asp Ala Pro Gly Asp Ala Asp Ala Pro Asp Pro Arg Leu Ala Ala
    50                  55                  60

Leu Leu Gly Pro Pro Glu Arg Ser Tyr Ser Leu Cys Val Pro Val Thr
65                  70                  75                  80

Pro Asp Ala Gly Cys Gly Ala Arg Val Arg Ala Ala Arg Leu His Gln
                85                  90                  95

Arg Leu Leu His Gln Leu Arg Arg Gly Pro Phe Gln Arg Cys Gln Leu
            100                 105                 110

Leu Arg Leu Leu Cys Tyr Cys Pro Gly Gly Gln Ala Gly Gly Ala Gln
        115                 120                 125

Gln Gly Phe Leu Leu Arg Asp Pro Leu Asp Asp Pro Asp Thr Arg Gln
    130                 135                 140
```

Ala Leu Leu Glu Leu Leu Gly Ala Cys Gln Glu Ala Pro Arg Pro His
145 150 155 160

Leu Gly Glu Phe Glu Ala Asp Pro Arg Gly Gln Leu Trp Gln Arg Leu
165 170 175

Trp Glu Val Gln Asp Gly Arg Arg Leu Gln Val Gly Cys Ala Gln Val
180 185 190

Val Pro Val Pro Glu Pro Pro Leu His Pro Val Val Pro Asp Leu Pro
195 200 205

Ser Ser Val Val Phe Pro Asp Arg Glu Ala Ala Arg Ala Val Leu Glu
210 215 220

Glu Cys Thr Ser Phe Ile Pro Glu Ala Arg Ala Val Leu Asp Leu Val
225 230 235 240

Asp Gln Cys Pro Lys Gln Ile Gln Lys Gly Lys Phe Gln Val Val Ala
245 250 255

Ile Glu Gly Leu Asp Ala Thr Gly Lys Thr Thr Val Thr Gln Ser Val
260 265 270

Ala Asp Ser Leu Lys Ala Val Leu Leu Lys Ser Pro Pro Ser Cys Ile
275 280 285

Gly Gln Trp Arg Lys Ile Phe Asp Asp Glu Pro Thr Ile Ile Arg Arg
290 295 300

Ala Phe Tyr Ser Leu Gly Asn Tyr Ile Val Ala Ser Glu Ile Ala Lys
305 310 315 320

Glu Ser Ala Lys Ser Pro Val Ile Val Asp Arg Tyr Trp His Ser Thr
325 330 335

Ala Thr Tyr Ala Ile Ala Thr Glu Val Ser Gly Gly Leu Gln His Leu
340 345 350

Pro Pro Ala His His Pro Val Tyr Gln Trp Pro Glu Asp Leu Leu Lys
355 360 365

Pro Asp Leu Ile Leu Leu Leu Thr Val Ser Pro Glu Glu Arg Leu Gln
370 375 380

Arg Leu Gln Gly Arg Gly Met Glu Lys Thr Arg Glu Glu Ala Glu Leu

385 390 395 400

Glu Ala Asn Ser Val Phe Arg Gln Lys Val Glu Met Ser Tyr Gln Arg
405 410 415

Met Glu Asn Pro Gly Cys His Val Val Asp Ala Ser Pro Ser Arg Glu
420 425 430

Lys Val Leu Gln Thr Val Leu Ser Leu Ile Gln Asn Ser Phe Ser Glu
435 440 445

Pro

<210> 206
<211> 590
<212> PRT
<213> Homo sapien

<400> 206

Pro Lys Ala Asn Glu Gln Leu Asn Arg Arg Ser Gln Arg Leu Gln Gln
1 5 10 15

Leu Thr Glu Val Ser Arg Arg Ser Leu Arg Ser Arg Glu Ile Gln Gly
20 25 30

Gln Val Gln Ala Val Lys Gln Ser Leu Pro Pro Thr Lys Lys Glu Gln
35 40 45

Cys Ser Ser Thr Gln Ser Lys Ser Asn Lys Thr Ser Gln Lys His Val
50 55 60

Lys Arg Lys Val Leu Glu Val Lys Ser Asp Ser Lys Glu Asp Glu Asn
65 70 75 80

Leu Val Ile Asn Glu Val Ile Asn Ser Pro Lys Gly Lys Lys Arg Lys
85 90 95

Val Glu His Gln Thr Ala Cys Ala Cys Ser Ser Gln Cys Met Gln Gly
100 105 110

Ser Glu Lys Cys Pro Gln Lys Thr Thr Arg Arg Asp Glu Thr Lys Pro
115 120 125

Val Pro Val Thr Ser Glu Val Lys Arg Ser Lys Met Ala Thr Ser Val
130 135 140

```
Val Pro Lys Lys Asn Glu Met Lys Lys Ser Val His Thr Gln Val Asn
145                 150                 155                 160

Thr Asn Thr Thr Leu Pro Lys Ser Pro Gln Pro Ser Val Pro Glu Gln
                165                 170                 175

Ser Asp Asn Glu Leu Glu Gln Ala Gly Lys Ser Lys Arg Gly Ser Ile
            180                 185                 190

Leu Gln Leu Cys Glu Glu Ile Ala Gly Glu Ile Glu Ser Asp Asn Val
        195                 200                 205

Glu Val Lys Lys Glu Ser Ser Gln Met Glu Ser Val Lys Glu Glu Lys
    210                 215                 220

Pro Thr Glu Ile Lys Leu Glu Glu Thr Ser Val Glu Arg Gln Ile Leu
225                 230                 235                 240

His Gln Lys Glu Thr Asn Gln Asp Val Gln Cys Asn Arg Phe Phe Pro
                245                 250                 255

Ser Arg Lys Thr Lys Pro Val Lys Cys Ile Leu Asn Gly Ile Asn Ser
            260                 265                 270

Ser Ala Lys Lys Asn Ser Asn Trp Thr Lys Ile Lys Leu Ser Lys Phe
        275                 280                 285

Asn Ser Val Gln His Asn Lys Leu Asp Ser Gln Val Ser Pro Lys Leu
    290                 295                 300

Gly Leu Leu Arg Thr Ser Phe Ser Pro Pro Ala Leu Glu Met His His
305                 310                 315                 320

Pro Val Thr Gln Ser Thr Phe Leu Gly Thr Lys Leu His Asp Arg Asn
                325                 330                 335

Ile Thr Cys Gln Gln Glu Lys Met Lys Glu Ile Asn Ser Glu Glu Val
            340                 345                 350

Lys Ile Asn Asp Ile Thr Val Glu Ile Asn Lys Thr Thr Glu Arg Ala
        355                 360                 365

Pro Glu Asn Cys His Leu Ala Asn Glu Ile Lys Pro Ser Asp Pro Pro
    370                 375                 380
```

```
Leu Asp Asn Gln Met Lys His Ser Phe Asp Ser Ala Ser Asn Lys Asn
385                 390                 395                 400

Phe Ser Gln Cys Leu Glu Ser Lys Leu Glu Asn Ser Pro Val Glu Asn
                405                 410                 415

Val Thr Ala Ala Ser Thr Leu Leu Ser Gln Ala Lys Ile Asp Thr Gly
            420                 425                 430

Glu Asn Lys Phe Pro Gly Ser Ala Pro Gln Gln His Ser Ile Leu Ser
        435                 440                 445

Asn Gln Thr Ser Lys Ser Ser Asp Asn Arg Glu Thr Pro Arg Asn His
    450                 455                 460

Ser Leu Pro Lys Cys Asn Ser His Leu Glu Ile Thr Ile Pro Lys Asp
465                 470                 475                 480

Leu Lys Leu Lys Glu Ala Glu Lys Thr Asp Glu Lys Gln Leu Ile Ile
                485                 490                 495

Asp Ala Gly Gln Lys Arg Phe Gly Ala Val Ser Cys Asn Val Cys Gly
            500                 505                 510

Met Leu Tyr Thr Ala Ser Asn Pro Glu Asp Glu Thr Gln His Leu Leu
        515                 520                 525

Phe His Asn Gln Phe Ile Ser Ala Val Lys Tyr Val Val Leu Leu Ile
    530                 535                 540

Asn His His Glu Cys Gly Ser Glu Glu Glu Phe Ile Thr Ser Leu Phe
545                 550                 555                 560

Leu Ser Met Phe Asn Phe Arg Tyr Thr Gln Arg Ser Phe Ser Phe Pro
                565                 570                 575

Ile Arg Phe Leu Glu Gly Leu Glu Glu Arg Lys Asn Ser Gly
            580                 585                 590

<210>  207
<211>  661
<212>  PRT
<213>  Homo sapien

<400>  207

Met Gln Gly Ser Glu Lys Cys Pro Gln Lys Thr Thr Arg Arg Asp Glu
1               5                   10                  15
```

```
Thr Lys Pro Val Pro Val Thr Ser Glu Val Lys Arg Ser Lys Met Ala
            20                  25                  30

Thr Ser Val Val Pro Lys Lys Asn Glu Met Lys Lys Ser Val His Thr
        35                  40                  45

Gln Val Asn Thr Asn Thr Thr Leu Pro Lys Ser Pro Gln Pro Ser Val
    50                  55                  60

Pro Glu Gln Ser Asp Asn Glu Leu Glu Gln Ala Gly Lys Ser Lys Arg
65                  70                  75                  80

Gly Ser Ile Leu Gln Leu Cys Glu Glu Ile Ala Gly Glu Ile Glu Ser
                85                  90                  95

Asp Asn Val Glu Val Lys Lys Glu Ser Ser Gln Met Glu Ser Val Lys
            100                 105                 110

Glu Glu Lys Pro Thr Glu Ile Lys Leu Glu Glu Thr Ser Val Glu Arg
        115                 120                 125

Gln Ile Leu His Gln Lys Glu Thr Asn Gln Asp Val Gln Cys Asn Arg
    130                 135                 140

Phe Phe Pro Ser Arg Lys Thr Lys Pro Val Lys Cys Ile Leu Asn Gly
145                 150                 155                 160

Ile Asn Ser Ser Ala Lys Lys Asn Ser Asn Trp Thr Lys Ile Lys Leu
                165                 170                 175

Ser Lys Phe Asn Ser Val Gln His Asn Lys Leu Asp Ser Gln Val Ser
            180                 185                 190

Pro Lys Leu Gly Leu Leu Arg Thr Ser Phe Ser Pro Pro Ala Leu Glu
        195                 200                 205

Met His His Pro Val Thr Gln Ser Thr Phe Leu Gly Thr Lys Leu His
    210                 215                 220

Asp Arg Asn Ile Thr Cys Gln Gln Glu Lys Met Lys Glu Ile Asn Ser
225                 230                 235                 240

Glu Glu Val Lys Ile Asn Asp Ile Thr Val Glu Ile Asn Lys Thr Thr
                245                 250                 255
```

Glu Arg Ala Pro Glu Asn Cys His Leu Ala Asn Glu Ile Lys Pro Ser
260 265 270

Asp Pro Pro Leu Asp Asn Gln Met Lys His Ser Phe Asp Ser Ala Ser
275 280 285

Asn Lys Asn Phe Ser Gln Cys Leu Glu Ser Lys Leu Glu Asn Ser Pro
290 295 300

Val Glu Asn Val Thr Ala Ala Ser Thr Leu Leu Ser Gln Ala Lys Ile
305 310 315 320

Asp Thr Gly Glu Asn Lys Phe Pro Gly Ser Ala Pro Gln Gln His Ser
325 330 335

Ile Leu Ser Asn Gln Thr Ser Lys Ser Ser Asp Asn Arg Glu Thr Pro
340 345 350

Arg Asn His Ser Leu Pro Lys Cys Asn Ser His Leu Glu Ile Thr Ile
355 360 365

Pro Lys Asp Leu Lys Leu Lys Glu Ala Glu Lys Thr Asp Glu Lys Gln
370 375 380

Leu Ile Ile Asp Ala Gly Gln Lys Arg Phe Gly Ala Val Ser Cys Asn
385 390 395 400

Val Cys Gly Met Leu Tyr Thr Ala Ser Asn Pro Glu Asp Glu Thr Gln
405 410 415

His Leu Leu Phe His Asn Gln Phe Ile Ser Ala Val Lys Tyr Val Val
420 425 430

Leu Leu Ile Asn His His Glu Cys Gly Ser Glu Glu Glu Phe Ile Thr
435 440 445

Ser Leu Phe Leu Ser Met Phe Asn Phe Arg Tyr Thr Gln Arg Ser Phe
450 455 460

Ser Phe Pro Ile Arg Phe Leu Glu Gly Trp Lys Lys Glu Arg Ile Leu
465 470 475 480

Ala Glu Tyr Pro Asp Gly Arg Ile Ile Met Val Leu Pro Glu Asp Pro
485 490 495

Lys Tyr Ala Leu Lys Lys Val Asp Glu Ile Arg Glu Met Val Asp Asn
500 505 510

Asp Leu Gly Phe Gln Gln Ala Pro Leu Met Cys Tyr Ser Arg Thr Lys
515 520 525

Thr Leu Leu Phe Ile Ser Asn Asp Lys Lys Val Val Gly Cys Leu Ile
530 535 540

Ala Glu His Ile Gln Trp Gly Tyr Arg Val Ile Glu Glu Lys Leu Pro
545 550 555 560

Val Ile Arg Ser Glu Glu Glu Lys Val Arg Phe Glu Arg Gln Lys Ala
565 570 575

Trp Cys Cys Ser Thr Leu Pro Glu Pro Ala Ile Cys Gly Ile Ser Arg
580 585 590

Ile Trp Val Phe Ser Met Met Arg Arg Lys Lys Ile Ala Ser Arg Met
595 600 605

Ile Glu Cys Leu Arg Ser Asn Phe Ile Tyr Gly Ser Tyr Leu Ser Lys
610 615 620

Glu Glu Ile Ala Phe Ser Asp Pro Thr Pro Asp Gly Lys Leu Phe Ala
625 630 635 640

Thr Gln Tyr Cys Gly Thr Gly Gln Phe Leu Val Tyr Asn Phe Ile Asn
645 650 655

Gly Gln Asn Ser Thr
660

<210> 208
<211> 157
<212> PRT
<213> Homo sapien

<400> 208

Met Thr Thr Val Glu Arg Gly Cys Gly Ser Gly Ala Ala Trp Arg Ala
1 5 10 15

Val Gln Cys Arg Ala Gly Val Ser Gln Gly Leu Val Ala Thr Val Glu
20 25 30

Arg Gly Cys Gly Ser Gly Gly Ser Pro Ala Cys Ser Pro Val Pro Gly
35 40 45

```
Arg Ser Leu Ala Glu Cys Ser Leu Thr Pro Pro Arg Gly Ser Pro Gly
    50                  55                  60

Pro Tyr Arg Leu Pro Gln Leu Gln Ser Trp Val Pro Ser Asp Ala Val
65                  70                  75                  80

Ala Gly Gln Arg Glu Ala Glu Ala Gly Ser Pro Arg Glu Ala Trp Ala
                85                  90                  95

Pro Ser Pro Gly His Gly Cys Pro Ser Arg Ser Ser Ser Leu Gln Pro
            100                 105                 110

Gln Ser Gln Gly Asp Val Gly Thr Gly Val Lys Ser Gly Trp Ser Val
        115                 120                 125

Ala Leu Arg Pro Gln Glu Arg Tyr Gly Leu Lys Pro Ala Ala Arg Ala
    130                 135                 140

Cys His Thr Arg Val Gly Pro Pro Leu His Ile Leu Arg
145                 150                 155
```

<210> 209
<211> 269
<212> PRT
<213> Homo sapien

<400> 209

```
Met Asp Arg Pro Pro Gly Gln Val Lys Ala Ala Thr Ser Asp Leu Glu
1               5                   10                  15

His Tyr Asp Lys Thr Arg His Glu Glu Phe Lys Lys Tyr Glu Met Met
            20                  25                  30

Lys Glu His Glu Arg Arg Glu Tyr Leu Lys Thr Leu Asn Glu Glu Lys
        35                  40                  45

Arg Lys Glu Glu Glu Ser Lys Phe Glu Glu Met Lys Lys Lys His Glu
    50                  55                  60

Asn His Pro Lys Val Asn His Pro Gly Ser Lys Asp Gln Leu Lys Glu
65                  70                  75                  80

Val Trp Glu Glu Thr Asp Gly Leu Asp Pro Asn Asp Phe Asp Pro Lys
                85                  90                  95
```

Thr Phe Phe Lys Leu His Asp Val Asn Ser Asp Gly Phe Leu Asp Glu
100 105 110

Gln Glu Leu Glu Ala Leu Phe Thr Lys Glu Leu Glu Lys Val Tyr Asp
115 120 125

Pro Lys Asn Glu Glu Asp Asp Met Val Glu Met Glu Glu Glu Arg Leu
130 135 140

Arg Met Arg Glu His Val Met Asn Glu Val Asp Thr Asn Lys Asp Arg
145 150 155 160

Leu Val Thr Leu Glu Glu Phe Leu Lys Ala Thr Glu Lys Lys Glu Phe
165 170 175

Leu Glu Pro Asp Ser Trp Glu Thr Leu Asp Gln Gln Gln Phe Phe Thr
180 185 190

Glu Glu Glu Leu Lys Glu Tyr Glu Asn Ile Ile Ala Leu Gln Glu Asn
195 200 205

Glu Leu Lys Lys Lys Ala Asp Glu Leu Gln Lys Gln Lys Glu Glu Leu
210 215 220

Gln Arg Gln His Asp Gln Leu Glu Ala Gln Lys Leu Glu Tyr His Gln
225 230 235 240

Val Ile Gln Gln Met Glu Gln Lys Lys Leu Gln Gln Gly Ile Pro Pro
245 250 255

Ser Gly Pro Ala Gly Glu Leu Lys Phe Glu Pro His Ile
260 265

<210> 210
<211> 363
<212> PRT
<213> Homo sapien

<400> 210

Met Arg Trp Arg Thr Ile Leu Leu Gln Tyr Cys Phe Leu Leu Ile Thr
1 5 10 15

Cys Leu Leu Thr Ala Leu Glu Ala Val Pro Ile Asp Ile Asp Lys Thr
20 25 30

Lys Val Gln Asn Ile His Pro Val Glu Ser Ala Lys Ile Glu Pro Pro
35 40 45

```
Asp Thr Gly Leu Tyr Tyr Asp Glu Tyr Leu Lys Gln Val Ile Asp Val
     50                  55                  60

Leu Glu Thr Asp Lys His Phe Arg Glu Lys Leu Gln Lys Ala Asp Ile
65                  70                  75                  80

Glu Glu Ile Lys Ser Gly Arg Leu Ser Lys Glu Leu Asp Leu Val Ser
                 85                  90                  95

His His Val Arg Thr Lys Leu Asp Glu Leu Lys Arg Gln Glu Val Gly
            100                 105                 110

Arg Leu Arg Met Leu Ile Lys Ala Lys Leu Asp Ser Leu Gln Asp Ile
        115                 120                 125

Gly Met Asp His Gln Ala Leu Leu Lys Gln Phe Asp His Leu Asn His
    130                 135                 140

Leu Asn Pro Asp Lys Phe Glu Ser Thr Asp Leu Asp Met Leu Ile Lys
145                 150                 155                 160

Ala Ala Thr Ser Asp Leu Glu His Tyr Asp Lys Thr Arg His Glu Glu
                165                 170                 175

Phe Lys Lys Tyr Glu Met Met Lys Glu His Glu Arg Arg Glu Tyr Leu
            180                 185                 190

Lys Thr Leu Asn Glu Glu Lys Arg Lys Glu Glu Glu Ser Lys Phe Glu
        195                 200                 205

Glu Met Lys Lys Lys His Glu Asn His Pro Lys Val Asn His Pro Gly
    210                 215                 220

Ser Lys Asp Gln Leu Lys Glu Val Trp Glu Glu Thr Asp Gly Leu Asp
225                 230                 235                 240

Pro Asn Asp Phe Asp Pro Lys Thr Phe Phe Lys Leu His Asp Val Asn
                245                 250                 255

Ser Asp Gly Phe Leu Asp Glu Gln Glu Leu Glu Ala Leu Phe Thr Lys
            260                 265                 270

Glu Leu Glu Lys Val Tyr Asp Pro Lys Asn Glu Glu Asp Asp Met Val
        275                 280                 285
```

Glu Met Glu Glu Glu Arg Leu Arg Met Arg Glu His Val Met Asn Glu
290 295 300

Val Asp Thr Asn Lys Asp Arg Leu Val Thr Leu Glu Glu Phe Leu Lys
305 310 315 320

Ala Thr Glu Lys Lys Glu Phe Leu Glu Pro Asp Ser Trp Glu Val Ile
325 330 335

Gln Gln Met Glu Gln Lys Lys Leu Gln Gln Gly Ile Pro Pro Ser Gly
340 345 350

Pro Ala Gly Glu Leu Lys Phe Glu Pro His Ile
355 360

<210> 211
<211> 420
<212> PRT
<213> Homo sapien

<400> 211

Met Arg Trp Arg Thr Ile Leu Leu Gln Tyr Cys Phe Leu Leu Ile Thr
1 5 10 15

Cys Leu Leu Thr Ala Leu Glu Ala Val Pro Ile Asp Ile Asp Lys Thr
20 25 30

Lys Val Gln Asn Ile His Pro Val Glu Ser Ala Lys Ile Glu Pro Pro
35 40 45

Asp Thr Gly Leu Tyr Tyr Asp Glu Tyr Leu Lys Gln Val Ile Asp Val
50 55 60

Leu Glu Thr Asp Lys His Phe Arg Glu Lys Leu Gln Lys Ala Asp Ile
65 70 75 80

Glu Glu Ile Lys Ser Gly Arg Leu Ser Lys Glu Leu Asp Leu Val Ser
85 90 95

His His Val Arg Thr Lys Leu Asp Glu Leu Lys Arg Gln Glu Val Gly
100 105 110

Arg Leu Arg Met Leu Ile Lys Ala Lys Leu Asp Ser Leu Gln Asp Ile
115 120 125

Gly Met Asp His Gln Ala Leu Leu Lys Gln Phe Asp His Leu Asn His

```
    130                 135                 140

Leu Asn Pro Asp Lys Phe Glu Ser Thr Asp Leu Asp Met Leu Ile Lys
145                 150                 155                 160

Ala Ala Thr Ser Asp Leu Glu His Tyr Asp Lys Thr Arg His Glu Glu
                165                 170                 175

Phe Lys Lys Tyr Glu Met Met Lys Glu His Glu Arg Arg Glu Tyr Leu
            180                 185                 190

Lys Thr Leu Asn Glu Glu Lys Arg Lys Glu Glu Glu Ser Lys Phe Glu
        195                 200                 205

Glu Met Lys Lys Lys His Glu Asn His Pro Lys Val Asn His Pro Gly
    210                 215                 220

Ser Lys Asp Gln Leu Lys Glu Val Trp Glu Glu Thr Asp Gly Leu Asp
225                 230                 235                 240

Pro Asn Asp Phe Asp Pro Lys Thr Phe Phe Lys Leu His Asp Val Asn
                245                 250                 255

Ser Asp Gly Phe Leu Asp Glu Gln Glu Leu Glu Ala Leu Phe Thr Lys
            260                 265                 270

Glu Leu Glu Lys Val Tyr Asp Pro Lys Asn Glu Glu Asp Asp Met Val
        275                 280                 285

Glu Met Glu Glu Glu Arg Leu Arg Met Arg Glu His Val Met Asn Glu
    290                 295                 300

Val Asp Thr Asn Lys Asp Arg Leu Val Thr Leu Glu Glu Phe Leu Lys
305                 310                 315                 320

Ala Thr Glu Lys Lys Glu Phe Leu Glu Pro Asp Ser Trp Glu Thr Leu
                325                 330                 335

Asp Gln Gln Gln Phe Phe Thr Glu Glu Glu Leu Lys Glu Tyr Glu Asn
            340                 345                 350

Ile Ile Ala Leu Gln Glu Asn Glu Leu Lys Lys Lys Ala Asp Glu Leu
        355                 360                 365

Gln Lys Gln Lys Glu Glu Leu Gln Arg Gln His Asp Gln Leu Glu Ala
    370                 375                 380
```

```
Gln Lys Leu Glu Tyr His Gln Val Ile Gln Gln Met Glu Gln Lys Lys
385                 390                 395                 400

Leu Gln Gln Gly Ile Pro Pro Ser Gly Pro Ala Gly Glu Leu Lys Phe
                405                 410                 415

Glu Pro His Ile
            420
```

<210> 212
<211> 162
<212> PRT
<213> Homo sapien

<400> 212

```
Met Gln Thr Ser Val Thr Trp Glu Ile Pro Phe Pro Thr Asn Ser Leu
1               5                   10                  15

Val Val Lys Leu His Ser Met Asp Lys Ile Thr Tyr Tyr His Lys Ile
            20                  25                  30

Lys Lys Cys Ile Phe Ser Ala Leu Arg Ala Arg Asn Thr Arg Arg Ser
        35                  40                  45

Ile Lys Leu Asp Gly Lys Gly Glu Pro Lys Gly Ala Lys Arg Ala Lys
    50                  55                  60

Pro Val Lys Tyr Thr Ala Ala Lys Leu His Glu Lys Gly Val Leu Leu
65                  70                  75                  80

Asp Ile Asp Asp Leu Gln Thr Asn Gln Phe Lys Asn Val Thr Phe Asp
                85                  90                  95

Ile Ile Ala Thr Glu Asp Val Gly Ile Phe Asp Val Arg Ser Lys Phe
            100                 105                 110

Leu Gly Val Glu Met Glu Lys Val Gln Leu Asn Ile Gln Asp Leu Leu
        115                 120                 125

Gln Met Gln Tyr Glu Gly Val Ala Val Met Lys Met Phe Asp Lys Val
    130                 135                 140

Lys Val Asn Val Asn Leu Leu Ile Tyr Leu Leu Asn Lys Lys Phe Tyr
145                 150                 155                 160
```

Gly Lys

<210> 213
<211> 69
<212> PRT
<213> Homo sapien

<400> 213

Tyr Phe Thr Leu Phe Tyr Tyr Lys Phe Arg Ser Leu Cys Phe Thr Ile
1 5 10 15

Asn Ser Asp Tyr Pro Asn Ile Phe Leu Ile Leu Cys Gly Asn Ala Asp
20 25 30

Phe Leu Leu Leu Arg Ser Gly Asn Ile Leu His Cys Leu His Ser Ser
35 40 45

His Gly Thr Trp Lys Phe Leu Lys Val Ile Tyr Asp Thr His Phe Leu
50 55 60

Cys Met Tyr Ser Asn
65

<210> 214
<211> 42
<212> PRT
<213> Homo sapien

<400> 214

Gln Ser Ser Ala Glu Ala Gly Gly Gly Asp Glu Arg Glu Ile Asn Thr
1 5 10 15

Tyr Gly Arg Trp Ala Leu Met Gln Cys Glu Arg Arg Ser Val Met Asp
20 25 30

Val Arg Gly Arg Gly Thr Ser Glu Leu Pro
35 40

<210> 215
<211> 172
<212> PRT
<213> Homo sapien

<400> 215

Gly Thr Gly Leu Pro Trp His Ser Thr Pro Ala Gln Leu Ala Leu Ala
1 5 10 15

```
Gly Leu Arg Gln Ala Gln Pro His Pro Gln Gln Gln Arg Leu His Gln
            20                  25                  30

Pro Gly Leu Arg Gly Val Asp Ala His Gly Ser Ala Ala His Val Pro
        35                  40                  45

Gln Ala Val Pro Gln Ala Val Arg Ala His Pro Pro Gly Gln Leu Leu
    50                  55                  60

Ser Trp Ala Ala Ala Val Cys Leu Leu Cys Gln His His Leu Gln Leu
65                  70                  75                  80

Pro Gly Lys Lys Arg Asn Ser Thr Leu Tyr Ile Thr Met Leu Leu Ile
                85                  90                  95

Val Pro Val Ile Val Ala Gly Ala Ile Ile Val Leu Leu Leu Tyr Leu
            100                 105                 110

Lys Arg Leu Lys Ile Ile Ile Phe Pro Pro Ile Pro Asp Pro Gly Lys
        115                 120                 125

Ile Phe Lys Glu Met Phe Gly Asp Gln Asn Asp Asp Thr Leu His Trp
    130                 135                 140

Lys Lys Tyr Asp Ile Tyr Glu Lys Gln Thr Lys Glu Glu Thr Asp Ser
145                 150                 155                 160

Val Val Leu Ile Glu Asn Leu Lys Lys Ala Ser Gln
                165                 170
```

<210> 216
<211> 134
<212> PRT
<213> Homo sapien

<400> 216

```
Met Arg Met Ala Ala Leu Pro Thr Phe Arg Lys Leu Phe Arg Lys Leu
1               5                   10                  15

Tyr Gly His Ile Arg Gln Gly Asn Tyr Ser Ala Gly Leu Pro Arg Cys
            20                  25                  30

Val Tyr Cys Val Asn Ile Thr Tyr Asn Tyr Leu Gly Lys Lys Arg Asn
        35                  40                  45

Ser Thr Leu Tyr Ile Thr Met Leu Leu Ile Val Pro Val Ile Val Ala
    50                  55                  60
```

Gly Ala Ile Ile Val Leu Leu Leu Tyr Leu Lys Arg Leu Lys Ile Ile
65 70 75 80

Ile Phe Pro Pro Ile Pro Asp Pro Gly Lys Ile Phe Lys Glu Met Phe
85 90 95

Gly Asp Gln Asn Asp Asp Thr Leu His Trp Lys Lys Tyr Asp Ile Tyr
100 105 110

Glu Lys Gln Thr Lys Glu Glu Thr Asp Ser Val Val Leu Ile Glu Asn
115 120 125

Leu Lys Lys Ala Ser Gln
130

<210> 217
<211> 396
<212> PRT
<213> Homo sapien

<400> 217

Met Leu Met Ala Lys Gly Lys Leu Lys Pro Thr Gln Asn Ala Ser Glu
1 5 10 15

Lys Leu Gln Ala Pro Gly Lys Gly Leu Thr Ser Asn Lys Ser Lys Asp
20 25 30

Asp Leu Val Val Ala Glu Val Glu Ile Asn Asp Val Pro Leu Thr Cys
35 40 45

Arg Asn Leu Leu Thr Arg Gly Gln Thr Gln Asp Glu Ile Ser Arg Leu
50 55 60

Ser Gly Ala Ala Val Ser Thr Arg Gly Arg Phe Met Thr Thr Glu Glu
65 70 75 80

Lys Ala Lys Val Gly Pro Gly Asp Arg Pro Leu Tyr Leu His Val Gln
85 90 95

Gly Gln Thr Arg Glu Leu Val Asp Arg Ala Val Asn Arg Ile Lys Glu
100 105 110

Ile Ile Thr Asn Gly Val Val His Gln Pro Ala Pro Ile Ala Gln Leu
115 120 125

```
Ser Pro Ala Val Ser Gln Lys Pro Pro Phe Gln Ser Gly Met His Tyr
    130                 135                 140

Val Gln Asp Lys Leu Phe Val Gly Leu Glu His Ala Val Pro Thr Phe
145                 150                 155                 160

Asn Val Lys Glu Lys Val Glu Gly Pro Gly Cys Ser Tyr Leu Gln His
                165                 170                 175

Ile Gln Ile Glu Thr Gly Ala Lys Val Phe Leu Arg Gly Lys Gly Ser
            180                 185                 190

Gly Cys Ile Glu Pro Ala Ser Gly Arg Glu Ala Phe Glu Pro Met Tyr
        195                 200                 205

Ile Tyr Ile Ser His Pro Lys Pro Glu Gly Leu Ala Ala Ala Lys Lys
    210                 215                 220

Leu Cys Glu Asn Leu Leu Gln Thr Val His Ala Glu Tyr Ser Arg Phe
225                 230                 235                 240

Val Asn Gln Ile Asn Thr Ala Val Pro Leu Pro Gly Tyr Thr Gln Pro
                245                 250                 255

Ser Ala Ile Ser Ser Val Pro Pro Gln Pro Pro Tyr Tyr Pro Ser Asn
            260                 265                 270

Gly Tyr Gln Ser Gly Tyr Pro Val Val Pro Pro Pro Gln Gln Pro Val
        275                 280                 285

Gln Pro Pro Tyr Gly Val Pro Ser Ile Val Pro Pro Ala Val Ser Leu
    290                 295                 300

Ala Pro Gly Val Leu Pro Ala Leu Pro Thr Gly Val Pro Pro Val Pro
305                 310                 315                 320

Thr Gln Tyr Pro Ile Thr Gln Val Gln Pro Pro Ala Ser Thr Gly Gln
                325                 330                 335

Ser Pro Met Gly Gly Pro Phe Ile Pro Ala Ala Pro Val Lys Thr Ala
            340                 345                 350

Leu Pro Ala Gly Pro Gln Pro Gln Pro Gln Pro Gln Pro Pro Leu Pro
        355                 360                 365

Ser Gln Pro Gln Ala Gln Lys Arg Arg Phe Thr Glu Glu Leu Pro Asp
```

370 375 380

Glu Arg Glu Ser Gly Leu Leu Gly Tyr Gln Val Lys
385 390 395

<210> 218
<211> 255
<212> PRT
<213> Homo sapien

<400> 218

Met His Tyr Val Gln Asp Lys Leu Phe Val Gly Leu Glu His Ala Val
1 5 10 15

Pro Thr Phe Asn Val Lys Glu Lys Val Glu Gly Pro Gly Cys Ser Tyr
20 25 30

Leu Gln His Ile Gln Ile Glu Thr Gly Ala Lys Val Phe Leu Arg Gly
35 40 45

Lys Gly Ser Gly Cys Ile Glu Pro Ala Ser Gly Arg Glu Ala Phe Glu
50 55 60

Pro Met Tyr Ile Tyr Ile Ser His Pro Lys Pro Glu Gly Leu Ala Ala
65 70 75 80

Ala Lys Lys Leu Cys Glu Asn Leu Leu Gln Thr Val His Ala Glu Tyr
85 90 95

Ser Arg Phe Val Asn Gln Ile Asn Thr Ala Val Pro Leu Pro Gly Tyr
100 105 110

Thr Gln Pro Ser Ala Ile Ser Ser Val Pro Pro Gln Pro Pro Tyr Tyr
115 120 125

Pro Ser Asn Gly Tyr Gln Ser Gly Tyr Pro Val Val Pro Pro Pro Gln
130 135 140

Gln Pro Val Gln Pro Pro Tyr Gly Val Pro Ser Ile Val Pro Pro Ala
145 150 155 160

Val Ser Leu Ala Pro Gly Val Leu Pro Ala Leu Pro Thr Gly Val Pro
165 170 175

Pro Val Pro Thr Gln Tyr Pro Ile Thr Gln Val Gln Pro Pro Ala Ser
180 185 190

Thr Gly Gln Ser Pro Met Gly Gly Pro Phe Ile Pro Ala Ala Pro Val
195 200 205

Lys Thr Ala Leu Pro Ala Gly Pro Gln Pro Gln Pro Gln Pro Gln Pro
210 215 220

Pro Leu Pro Ser Gln Pro Gln Ala Gln Lys Arg Arg Phe Thr Glu Glu
225 230 235 240

Leu Pro Asp Glu Arg Glu Ser Gly Leu Leu Gly Tyr Gln Val Lys
245 250 255

<210> 219
<211> 412
<212> PRT
<213> Homo sapien

<400> 219

Lys Ile Val Asp Val Ile Arg Gln Glu Val Leu Glu Ser Ser Gln Val
1 5 10 15

Thr Phe Val His His Leu Gln Ala Phe Ala Ser Lys Ile Thr Gly Met
20 25 30

Leu Leu Glu Leu Ser Pro Ala Gln Leu Leu Leu Leu Leu Ala Ser Glu
35 40 45

Asp Ser Leu Arg Ala Arg Val Asp Glu Ala Met Glu Leu Ile Ile Ala
50 55 60

His Gly Arg Glu Asn Gly Ala Asp Ser Ile Leu Asp Leu Gly Leu Val
65 70 75 80

Asp Ser Ser Glu Lys Val Gln Gln Glu Asn Arg Lys Arg His Gly Ser
85 90 95

Ser Arg Ser Val Val Asp Met Asp Leu Asp Asp Thr Asp Asp Gly Asp
100 105 110

Asp Asn Ala Pro Leu Phe Tyr Gln Pro Gly Lys Arg Gly Phe Tyr Thr
115 120 125

Pro Arg Pro Gly Lys Asn Thr Glu Ala Arg Leu Asn Cys Phe Arg Asn
130 135 140

Ile Gly Arg Ile Leu Gly Leu Cys Leu Leu Gln Asn Glu Leu Cys Pro

145 150 155 160

Ile Thr Leu Asn Arg His Val Ile Lys Val Leu Leu Gly Arg Lys Val
165 170 175

Asn Trp His Asp Phe Ala Phe Phe Asp Pro Val Met Tyr Glu Ser Leu
180 185 190

Arg Gln Leu Ile Leu Ala Ser Gln Ser Ser Asp Ala Asp Ala Val Phe
195 200 205

Ser Ala Met Asp Leu Ala Phe Ala Ile Asp Leu Cys Lys Glu Glu Gly
210 215 220

Gly Gly Gln Val Glu Leu Ile Pro Asn Gly Val Asn Ile Pro Val Thr
225 230 235 240

Pro Gln Asn Val Tyr Glu Tyr Val Arg Lys Tyr Ala Glu His Arg Met
245 250 255

Leu Val Val Ala Glu Gln Pro Leu His Ala Met Arg Lys Gly Leu Leu
260 265 270

Asp Val Leu Pro Lys Asn Ser Leu Glu Asp Leu Thr Ala Glu Asp Phe
275 280 285

Arg Leu Leu Val Asn Gly Cys Gly Glu Val Asn Val Gln Met Leu Ile
290 295 300

Ser Phe Thr Ser Phe Asn Asp Glu Ser Gly Glu Asn Ala Glu Lys Leu
305 310 315 320

Leu Gln Phe Lys Arg Trp Phe Trp Ser Ile Val Glu Lys Met Ser Met
325 330 335

Thr Glu Arg Gln Asp Leu Val Tyr Phe Trp Thr Ser Ser Pro Ser Leu
340 345 350

Pro Ala Ser Glu Glu Gly Phe Gln Pro Met Pro Ser Ile Thr Ile Arg
355 360 365

Pro Pro Asp Asp Gln His Leu Pro Thr Ala Asn Thr Cys Ile Ser Arg
370 375 380

Leu Tyr Val Pro Leu Tyr Ser Ser Lys Gln Ile Leu Lys Gln Lys Leu
385 390 395 400

Leu Leu Ala Ile Lys Thr Lys Asn Phe Gly Phe Val
405 410

<210> 220
<211> 56
<212> PRT
<213> Homo sapien

<400> 220

Gly Lys Lys Lys Phe Asn Phe Gly Arg Leu Cys Tyr Leu Glu Ser Leu
1 5 10 15

Lys Phe Ser Leu Val Lys Met Asp Cys Ile Leu Leu Leu Thr Lys Ile
20 25 30

Ser Arg Ile Met Cys Gly Leu Leu Ile Ser Gly Met Leu Arg Ser Tyr
35 40 45

Ser Leu Thr Ile Lys Ile Leu Asn
50 55

<210> 221
<211> 430
<212> PRT
<213> Homo sapien

<400> 221

Glu Cys Pro Gly Arg Arg Asp Pro Gly Arg Gly Glu Arg Glu Gln Ser
1 5 10 15

Gly Val Arg Ala Ser Leu Trp Ala Gly Leu Gly Leu Gly Gly Arg Arg
20 25 30

Cys Gly Leu Gly Arg Phe Gly Arg Gly Gly Gly Arg Met Met Gly Arg
35 40 45

Val Arg Thr Leu Ala Gly Glu Cys Ser Ala Gln Ala Gln Ala Gln Ser
50 55 60

Leu Leu Ala Val Val Leu Ser Ala Pro Pro Ser Gly Gly Thr Pro Ser
65 70 75 80

Ala Arg Leu Ser Val Arg Ser Pro Ser Pro Arg Asp Pro Trp Gly Leu
85 90 95

Trp Ala Pro Val Leu Gln Met Thr Gly Ser Asn Glu Phe Lys Leu Asn

```
            100                 105                 110

Gln Pro Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser Pro Asn Thr
        115                 120                 125

Ser Gln Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val Arg Leu Tyr
    130                 135                 140

Asp Val Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His Thr Gly Ala
145                 150                 155                 160

Val Leu Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp Ser Gly Gly
                165                 170                 175

Leu Asp His Gln Leu Lys Met His Asp Leu Asn Thr Asp Gln Glu Asn
            180                 185                 190

Leu Val Gly Thr His Asp Ala Pro Ile Arg Cys Val Glu Tyr Cys Pro
        195                 200                 205

Glu Val Asn Val Met Val Thr Gly Ser Trp Asp Gln Thr Val Lys Leu
    210                 215                 220

Trp Asp Pro Arg Thr Pro Cys Asn Ala Gly Thr Phe Ser Gln Pro Glu
225                 230                 235                 240

Lys Val Tyr Thr Leu Ser Val Ser Gly Asp Arg Leu Ile Val Gly Thr
                245                 250                 255

Ala Gly Arg Arg Val Leu Val Trp Asp Leu Arg Asn Met Gly Tyr Val
            260                 265                 270

Gln Gln Arg Arg Glu Ser Ser Leu Lys Tyr Gln Thr Arg Cys Ile Arg
        275                 280                 285

Ala Phe Pro Asn Lys Gln Gly Tyr Val Leu Ser Ser Ile Glu Gly Arg
    290                 295                 300

Val Ala Val Glu Tyr Leu Asp Pro Ser Pro Glu Val Gln Lys Lys Lys
305                 310                 315                 320

Tyr Ala Phe Lys Cys His Arg Leu Lys Glu Asn Asn Ile Glu Gln Ile
                325                 330                 335

Tyr Pro Val Asn Ala Ile Ser Phe His Asn Ile His Asn Thr Phe Ala
            340                 345                 350
```

Thr Gly Gly Ser Asp Gly Phe Val Asn Ile Trp Asp Pro Phe Asn Lys
355 360 365

Lys Arg Leu Cys Gln Phe His Arg Tyr Pro Thr Ser Ile Ala Ser Leu
370 375 380

Ala Phe Ser Asn Asp Gly Thr Thr Leu Ala Ile Ala Ser Ser Tyr Met
385 390 395 400

Tyr Glu Met Asp Asp Thr Glu His Pro Glu Asp Gly Ile Phe Ile Arg
405 410 415

Gln Val Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys Thr
420 425 430

<210> 222
<211> 385
<212> PRT
<213> Homo sapien

<400> 222

Met Gly Arg Val Arg Thr Leu Ala Gly Glu Cys Ser Ala Gln Ala Gln
1 5 10 15

Ala Gln Ser Leu Leu Ala Val Val Leu Ser Ala Pro Pro Ser Gly Gly
20 25 30

Thr Pro Ser Ala Arg Leu Ser Val Arg Ser Pro Ser Pro Arg Asp Pro
35 40 45

Trp Gly Leu Trp Ala Pro Val Leu Gln Met Thr Gly Ser Asn Glu Phe
50 55 60

Lys Leu Asn Gln Pro Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser
65 70 75 80

Pro Asn Thr Ser Gln Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val
85 90 95

Arg Leu Tyr Asp Val Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His
100 105 110

Thr Gly Ala Val Leu Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp
115 120 125

```
Ser Gly Gly Leu Asp His Gln Leu Lys Met His Asp Leu Asn Thr Asp
    130                 135                 140

Gln Glu Asn Leu Val Gly Thr His Asp Ala Pro Ile Arg Cys Val Glu
145                 150                 155                 160

Tyr Cys Pro Glu Val Asn Val Met Val Thr Gly Ser Trp Asp Gln Thr
                165                 170                 175

Val Lys Leu Trp Asp Pro Arg Thr Pro Cys Asn Ala Gly Thr Phe Ser
            180                 185                 190

Gln Pro Glu Lys Val Tyr Thr Leu Ser Val Ser Gly Asp Arg Leu Ile
        195                 200                 205

Val Gly Thr Ala Gly Arg Arg Val Leu Val Trp Asp Leu Arg Asn Met
    210                 215                 220

Gly Tyr Val Gln Gln Arg Arg Glu Ser Ser Leu Lys Tyr Gln Thr Arg
225                 230                 235                 240

Cys Ile Arg Ala Phe Pro Asn Lys Gln Gly Tyr Val Leu Ser Ser Ile
                245                 250                 255

Glu Gly Arg Val Ala Val Glu Tyr Leu Asp Pro Ser Pro Glu Val Gln
            260                 265                 270

Lys Lys Lys Tyr Ala Phe Lys Cys His Arg Leu Lys Glu Asn Asn Ile
        275                 280                 285

Glu Gln Ile Tyr Pro Val Asn Ala Ile Ser Phe His Asn Ile His Asn
    290                 295                 300

Thr Phe Ala Thr Gly Gly Ser Asp Gly Phe Val Asn Ile Trp Asp Pro
305                 310                 315                 320

Phe Asn Lys Lys Arg Leu Cys Gln Phe His Arg Tyr Pro Thr Ser Ile
                325                 330                 335

Ala Ser Leu Ala Phe Ser Asn Asp Gly Thr Thr Leu Ala Ile Ala Ser
            340                 345                 350

Ser Tyr Met Tyr Glu Met Asp Asp Thr Glu His Pro Glu Asp Gly Ile
        355                 360                 365

Phe Ile Arg Gln Val Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys
```

370 375 380

Thr
385

<210> 223
<211> 123
<212> PRT
<213> Homo sapien

<400> 223

Met Pro Ser Ala Met Thr Val Tyr Ala Leu Val Val Val Ser Tyr Phe
1 5 10 15

Leu Ile Thr Gly Gly Ile Ile Tyr Asp Val Ile Val Glu Pro Pro Ser
20 25 30

Val Gly Ser Met Thr Asp Glu His Gly His Gln Arg Pro Val Ala Phe
35 40 45

Leu Ala Tyr Arg Val Asn Gly Gln Tyr Ile Met Glu Gly Leu Ala Ser
50 55 60

Ser Phe Leu Phe Thr Met Gly Gly Leu Gly Phe Ile Ile Leu Asp Arg
65 70 75 80

Ser Asn Ala Pro Asn Ile Pro Lys Leu Asn Arg Phe Leu Leu Leu Phe
85 90 95

Ile Gly Phe Val Cys Val Leu Leu Ser Phe Phe Met Ala Arg Val Phe
100 105 110

Met Arg Met Lys Leu Pro Gly Tyr Leu Met Gly
115 120

<210> 224
<211> 211
<212> PRT
<213> Homo sapien

<400> 224

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1 5 10 15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
20 25 30

```
Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
        35                  40                  45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
    50                  55                  60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65                  70                  75                  80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
                85                  90                  95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
            100                 105                 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
        115                 120                 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
    130                 135                 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145                 150                 155                 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
                165                 170                 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
            180                 185                 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
        195                 200                 205

Val Val Ala
    210
```

<210> 225
<211> 178
<212> PRT
<213> Homo sapien

<400> 225

```
Met Ala Arg Arg Pro Ala Gly Arg Glu Asn Ser Gly Val Pro Arg Gly
1               5                   10                  15

Leu Pro Lys Phe Ser Pro Pro Thr Phe Ser Ala Ala Thr Asn Val Arg
            20                  25                  30
```

Ala Ala Gln Arg Gly Arg Pro Arg Arg Ala Pro Asp Ala Thr Arg Arg
35 40 45

Thr Ala Arg Ala Gly Thr Thr Pro Pro Arg His Gly Gln Pro Pro Ala
50 55 60

His Ala Arg Ala Ala Pro Ala His Asn Arg Gly Leu Pro Ser Cys Cys
65 70 75 80

Ser Arg Cys Arg Ala Lys Ala Arg Tyr Ala Arg Pro Arg Arg Ala Glu
85 90 95

Ala Ala Ala Arg Ala Arg Arg Ala Thr Pro Ala Ala Pro Gly Trp Arg
100 105 110

Gly Gly Gly Thr Ala Thr Arg Pro Thr Arg Arg Arg Ala Gly Thr Asn
115 120 125

Ala His Asp Pro His Arg Asn Gly Glu Gln Arg Pro Ser Gly Gln Arg
130 135 140

Arg Pro Arg Arg Gly Ser Arg Arg Arg Arg His Glu Thr Arg Glu Ser
145 150 155 160

Glu Arg Pro Leu Arg Gly Ala Gly Pro Gly Val Pro Gly Pro Thr Arg
165 170 175

Gly Gly

<210> 226
<211> 211
<212> PRT
<213> Homo sapien

<400> 226

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1 5 10 15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
20 25 30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
35 40 45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
50 55 60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65 70 75 80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
85 90 95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
100 105 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
115 120 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
130 135 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145 150 155 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
165 170 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
180 185 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
195 200 205

Val Val Ala
210

<210> 227
<211> 211
<212> PRT
<213> Homo sapien

<400> 227

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1 5 10 15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
20 25 30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
35 40 45

```
Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
    50                  55                  60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65                  70                  75                  80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
                85                  90                  95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
            100                 105                 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
        115                 120                 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
    130                 135                 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145                 150                 155                 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
                165                 170                 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
            180                 185                 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
        195                 200                 205

Val Val Ala
    210
```

<210> 228
<211> 211
<212> PRT
<213> Homo sapien

<400> 228

```
Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1               5                   10                  15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
            20                  25                  30
```

```
Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
        35                  40                  45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
    50                  55                  60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65                  70                  75                  80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
                85                  90                  95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
            100                 105                 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
        115                 120                 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
    130                 135                 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145                 150                 155                 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
                165                 170                 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
            180                 185                 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
        195                 200                 205

Val Val Ala
    210


<210>  229
<211>  211
<212>  PRT
<213>  Homo sapien

<400>  229

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1               5                   10                  15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
            20                  25                  30
```

```
Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
        35                  40                  45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
    50                  55                  60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65                  70                  75                  80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
                85                  90                  95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
            100                 105                 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
        115                 120                 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
    130                 135                 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145                 150                 155                 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
                165                 170                 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
            180                 185                 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
        195                 200                 205

Val Val Ala
    210
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<212> PRT
<213> Homo sapien

<400> 230

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Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1               5                   10                  15
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Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
            20                  25                  30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
        35                  40                  45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
    50                  55                  60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65                  70                  75                  80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
                85                  90                  95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
            100                 105                 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
        115                 120                 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
    130                 135                 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145                 150                 155                 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
                165                 170                 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
            180                 185                 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
        195                 200                 205

Val Val Ala
    210
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<210> 231
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<213> Homo sapien

<400> 231

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Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1               5                   10                  15
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```
Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
            20                  25                  30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
        35                  40                  45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
    50                  55                  60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65                  70                  75                  80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
                85                  90                  95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
            100                 105                 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
        115                 120                 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
    130                 135                 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145                 150                 155                 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
                165                 170                 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
            180                 185                 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
        195                 200                 205

Val Val Ala
    210
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<210> 232
<211> 211
<212> PRT
<213> Homo sapien

<400> 232

```
Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys
1               5                  10                  15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
            20                  25                  30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala
        35                  40                  45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
    50                  55                  60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp
65                  70                  75                  80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln
                85                  90                  95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
            100                 105                 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu
        115                 120                 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly
    130                 135                 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln
145                 150                 155                 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser
                165                 170                 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg
            180                 185                 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg
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Val Val Ala
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<400> 234
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<400> 235
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<210> 241
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<212> DNA
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<400> 241
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